Alcohol QTL PDF set of three documents:

***1. AlcoholQTLsDescriptions**
2. AlcoholQTLsByChromosome
3. AlcoholQTLsByPhenotype

This document is 1 of 3, *AlcoholQTLsDescriptions

This document lists individual alcohol-related QTLs by *QTL Code*, in alphabetical order.

Detailed information includes, name, alias(es), the drug (*Alcohol* = ethanol), the broad phenotype designation, and a somewhat more detailed description of how that phenotype was assessed (*Assay*). LOD scores are typically based on df = 2 (i.e., two degrees of freedom). *Strains Tested* gives mapping populations for which data have been cumulated to test significance, which often includes selectively bred lines and/or congenic lines or strains. The sex specificity is given if known, the increaser allele identified as D2 (DBA/2J) or B6 (C57BL/6J), and dominance given if known. Where results are published, the references are given. Where unpublished, the PI's laboratory is stated. The time of the last update of the tabled information is indicated. QTL information for loss of righting reflex was obtained from Beth Bennett and Tom Johnson at the Institute for Behavior Genetics in Boulder.

About *QTL Code* - Names and Aliases

There is now terminological confusion for many traits. We at PARC adopted early on (and have maintained) the practice of not "naming" our QTLs in the literature unless they reached Lander & Kruglyak "significant" levels. These lists also report our "suggestive" QTLs by that standard. Mouse Genome Informatics has of their own initiative named several of our published QTLs. They also assigned names to some QTLs regardless of statistical significance. They made assumptions about the phenotypes in several instances. For instance, they treated Actre QTLs mapped in the Hitzemann lab as representing the same trait as Etact QTLs mapped in the Phillips lab. Both groups assessed Alcohol Stimulated Activity, but they used different doses of ethanol and different time periods after injections. To our way of very conservative thinking, these are not the same trait. So, we list a number of aliases in our table to try to indicate what is going on. The *QTL Code* name is our new local name, and sometimes combines two earlier names. For example, the Chronic Alcohol Withdrawal QTL on chromosome 14 we originally named Caws5 was renamed by MGI as Alcw7. We now also name all suggestive QTLs using the suffix "prov" for provisional, which allows us to keep them with the same basic name, and to upgrade them later if additional data render them significant.

For more information, contact Mark Rutledge-Gorman at rutledgm@ohsu.edu

Aaq1/Etacc

QTL Code	Aaq1/Etacc	PARC Alias	Etacc	MGI Alias	Aaq1
Drug	Alcohol	Phenotype	Alcohol Acceptance		
Assay	Total amount of 10% (v/v) ethanol consumed over 24-h period following 24-h period of water deprivation				
Chromosome	15	Peak	30	Range	15-48
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score	3.8	p value		Sex Specific	Male limited
Strains Tested	B6, D2, BXD RI, B6D2 F2	Increaser Allele	B6	Dominance	
Comments					
Contact Person		Last Updated	2007-04-10 13:12:20		

References

McClearn GE, Tarantino LM, Rodriguez LA, Jones BC, Blizard DA, Plomin R. Genotypic selection provides experimental confirmation for an alcohol consumption quantitative trait locus in mouse. Mol Psychiatry. 1997 Oct-Nov;2(6):486-9.
Medline Link

Actre1/Actre1q

QTL Code	Actre1/Actre1q	PARC Alias	Actre1q	MGI Alias	Actre1
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	1	Peak	90 cM	Range	
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score		p value	1e-12	Sex Specific	
Strains Tested	BXD RI, F2, HS	Increaser Allele		Dominance	
Comments					
Contact Person	R. Hitzemann	Last Updated	2007-04-12 10:46:09		

References

Malmanger B, Lawler M, Coulombe S, Murray R, Cooper S, Polyakov Y, Belknap J, Hitzemann R. Further studies on using multiple-cross mapping (MCM) to map quantitative trait loci. Mamm Genome 2006 Dec;17(12):1193-204.
Medline Link

Demarest K, Koyner J, McCaughran J Jr, Cipp L, Hitzemann R. Further characterization and high-resolution mapping of quantitative trait loci for ethanol-induced locomotor activity. Behav Genet. 2001 Jan;31(1):79-91.
Medline Link

Hitzemann R, Boudreau E and Malmanger B; unpublished data

Actre1q

QTL Code	Actre1q		
Chromosome	1	Class	Alcohol
Peak	90 cM	Phenotype	Ethanol-Stimulated Activity
Range		Assay	
p Value	1e-12	Strains Tested	BXD RI, F2, HS
LOD Score		Status	Significant

References

Demarest K, Koyner J, McCaughran J Jr, Cipp L, Hitzemann R. Further characterization and high-resolution mapping of quantitative trait loci for ethanol-induced locomotor activity. Behav Genet. 2001 Jan;31(1):79-91.
Medline Link

Actre2

QTL Code	Actre2	PARC Alias		MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	2	Peak	56 cM	Range	
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score		p value		Sex Specific	
Strains Tested		Increaser Allele		Dominance	
Comments	May be the same QTL as Actre3/Actre3q and/or Actre4				
Contact Person	R. Hitzemann	Last Updated	2007-04-09 13:56:34		

References

Malmanger B, Lawler M, Coulombe S, Murray R, Cooper S, Polyakov Y, Belknap J, Hitzemann R. Further studies on using multiple-cross mapping (MCM) to map quantitative trait loci. Mamm Genome 2006 Dec;17(12):1193-204. Medline Link

Hitzemann R, Boudreau E and Malmanger B; unpublished data

Actre3/Actre3q

QTL Code	Actre3/Actre3q	PARC Alias	Actre3q	MGI Alias	Actre3
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	2	Peak	60 cM	Range	
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score		p value	1e-07	Sex Specific	
Strains Tested	BXD RI, F2, HS	Increaser Allele		Dominance	
Comments					
Contact Person	R. Hitzemann	Last Updated	2007-04-09 13:56:34		

References

Demarest K, Koyner J, McCaughran J Jr, Cipp L, Hitzemann R. Further characterization and high-resolution mapping of quantitative trait loci for ethanol-induced locomotor activity. Behav Genet. 2001 Jan;31(1):79-91.
Medline Link

Actre3q

QTL Code	Actre3q		
Chromosome	2	Class	Alcohol
Peak	60 cM	Phenotype	Ethanol-Stimulated Activity
Range		Assay	
p Value	1e-07	Strains Tested	BXD RI, F2, HS
LOD Score		Status	Significant

References

Demarest K, Koyner J, McCaughran J Jr, Cipp L, Hitzemann R. Further characterization and high-resolution mapping of quantitative trait loci for ethanol-induced locomotor activity. Behav Genet. 2001 Jan;31(1):79-91.
Medline Link

Actre4

QTL Code	Actre4	PARC Alias		MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	2	Peak	65 cM	Range	
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score		p value		Sex Specific	
Strains Tested		Increaser Allele		Dominance	
Comments	May be the same QTL as Actre2 and/or Actre3/Actre3q				
Contact Person	R. Hitzemann	Last Updated	2007-04-09 13:54:44		

References

Demarest K, Koyner J, McCaughran J Jr, Cipp L, Hitzemann R. Further characterization and high-resolution mapping of quantitative trait loci for ethanol-induced locomotor activity. Behav Genet. 2001 Jan;31(1):79-91.
Medline Link

Actre5

QTL Code	Actre5	PARC Alias		MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	3	Peak	56 cM	Range	
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score		p value		Sex Specific	
Strains Tested		Increaser Allele		Dominance	
Comments					
Contact Person	R. Hitzemann	Last Updated	2007-04-09 14:07:07		

References

Malmanger B, Lawler M, Coulombe S, Murray R, Cooper S, Polyakov Y, Belknap J, Hitzemann R. Further studies on using multiple-cross mapping (MCM) to map quantitative trait loci. Mamm Genome 2006 Dec;17(12):1193-204. Medline Link

Hitzemann R, Boudreau E and Malmanger B; unpublished data

Actre6

QTL Code	Actre6	PARC Alias		MGI Alias	Actre6
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	9	Peak	52 cM	Range	
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score		p value		Sex Specific	
Strains Tested		Increaser Allele		Dominance	
Comments					
Contact Person	R. Hitzemann	Last Updated	2007-04-09 14:51:21		

References

Malmanger B, Lawler M, Coulombe S, Murray R, Cooper S, Polyakov Y, Belknap J, Hitzemann R. Further studies on using multiple-cross mapping (MCM) to map quantitative trait loci. Mamm Genome 2006 Dec;17(12):1193-204. Medline Link

Hitzemann R, Boudreau E and Malmanger B; unpublished data

Actre7

QTL Code	Actre7	PARC Alias		MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	1	Peak	113 cM	Range	
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score		p value		Sex Specific	
Strains Tested		Increaser Allele		Dominance	
Comments					
Contact Person	R. Hitzemann	Last Updated	2007-04-09 13:56:34		

References

Malmanger B, Lawler M, Coulombe S, Murray R, Cooper S, Polyakov Y, Belknap J, Hitzemann R. Further studies on using multiple-cross mapping (MCM) to map quantitative trait loci. Mamm Genome 2006 Dec;17(12):1193-204. Medline Link

Hitzemann R, Boudreau E and Malmanger B; unpublished data

Actre8

QTL Code	Actre8	PARC Alias		MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	4	Peak	8 cM	Range	
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score		p value		Sex Specific	
Strains Tested		Increaser Allele		Dominance	
Comments					
Contact Person	R. Hitzemann	Last Updated	2007-04-09 14:16:02		

References

Malmanger B, Lawler M, Coulombe S, Murray R, Cooper S, Polyakov Y, Belknap J, Hitzemann R. Further studies on using multiple-cross mapping (MCM) to map quantitative trait loci. Mamm Genome 2006 Dec;17(12):1193-204. Medline Link

Hitzemann R, Boudreau E and Malmanger B; unpublished data

Actre9

QTL Code	Actre9	PARC Alias		MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	6	Peak	17 cM	Range	
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score		p value		Sex Specific	
Strains Tested		Increaser Allele		Dominance	
Comments					
Contact Person	R. Hitzemann	Last Updated	2007-04-09 14:21:28		

References

Malmanger B, Lawler M, Coulombe S, Murray R, Cooper S, Polyakov Y, Belknap J, Hitzemann R. Further studies on using multiple-cross mapping (MCM) to map quantitative trait loci. Mamm Genome 2006 Dec;17(12):1193-204. Medline Link

Hitzemann R, Boudreau E and Malmanger B; unpublished data

Actre10

QTL Code	Actre10	PARC Alias		MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	7	Peak	34 cM	Range	
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score		p value		Sex Specific	
Strains Tested		Increaser Allele		Dominance	
Comments					
Contact Person	R. Hitzemann	Last Updated	2007-04-09 14:46:54		

References

Malmanger B, Lawler M, Coulombe S, Murray R, Cooper S, Polyakov Y, Belknap J, Hitzemann R. Further studies on using multiple-cross mapping (MCM) to map quantitative trait loci. Mamm Genome 2006 Dec;17(12):1193-204. Medline Link

Hitzemann R, Boudreau E and Malmanger B; unpublished data

Actre11

QTL Code	Actre11	PARC Alias		MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	7	Peak	61 cM	Range	
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score		p value		Sex Specific	
Strains Tested		Increaser Allele		Dominance	
Comments					
Contact Person	R. Hitzemann	Last Updated	2007-04-09 14:47:32		

References

Malmanger B, Lawler M, Coulombe S, Murray R, Cooper S, Polyakov Y, Belknap J, Hitzemann R. Further studies on using multiple-cross mapping (MCM) to map quantitative trait loci. Mamm Genome 2006 Dec;17(12):1193-204. Medline Link

Hitzemann R, Boudreau E and Malmanger B; unpublished data

Actre12

QTL Code	Actre12	PARC Alias		MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	8	Peak	48 cM	Range	
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score		p value		Sex Specific	
Strains Tested		Increaser Allele		Dominance	
Comments					
Contact Person	R. Hitzemann	Last Updated	2007-04-09 14:50:09		

References

Malmanger B, Lawler M, Coulombe S, Murray R, Cooper S, Polyakov Y, Belknap J, Hitzemann R. Further studies on using multiple-cross mapping (MCM) to map quantitative trait loci. Mamm Genome 2006 Dec;17(12):1193-204. Medline Link

Hitzemann R, Boudreau E and Malmanger B; unpublished data

Actre13

QTL Code	Actre13	PARC Alias		MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	10	Peak	51 cM	Range	
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score		p value		Sex Specific	
Strains Tested		Increaser Allele		Dominance	
Comments					
Contact Person	R. Hitzemann	Last Updated	2007-04-09 14:55:45		

References

Malmanger B, Lawler M, Coulombe S, Murray R, Cooper S, Polyakov Y, Belknap J, Hitzemann R. Further studies on using multiple-cross mapping (MCM) to map quantitative trait loci. Mamm Genome 2006 Dec;17(12):1193-204. Medline Link

Hitzemann R, Boudreau E and Malmanger B; unpublished data

Actre14

QTL Code	Actre14	PARC Alias		MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	11	Peak	37 cM	Range	
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score		p value		Sex Specific	
Strains Tested		Increaser Allele		Dominance	
Comments					
Contact Person	R. Hitzemann	Last Updated	2007-04-09 14:58:53		

References

Malmanger B, Lawler M, Coulombe S, Murray R, Cooper S, Polyakov Y, Belknap J, Hitzemann R. Further studies on using multiple-cross mapping (MCM) to map quantitative trait loci. Mamm Genome 2006 Dec;17(12):1193-204. Medline Link

Hitzemann R, Boudreau E and Malmanger B; unpublished data

Actre15

QTL Code	Actre15	PARC Alias		MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	14	Peak	37 cM	Range	
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score		p value		Sex Specific	
Strains Tested		Increaser Allele		Dominance	
Comments					
Contact Person	R. Hitzemann	Last Updated	2007-04-09 15:08:35		

References

Malmanger B, Lawler M, Coulombe S, Murray R, Cooper S, Polyakov Y, Belknap J, Hitzemann R. Further studies on using multiple-cross mapping (MCM) to map quantitative trait loci. Mamm Genome 2006 Dec;17(12):1193-204. Medline Link

Hitzemann R, Boudreau E and Malmanger B; unpublished data

Actre16

QTL Code	Actre16	PARC Alias		MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	15	Peak	67 cM	Range	
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score		p value		Sex Specific	
Strains Tested		Increaser Allele		Dominance	
Comments					
Contact Person	R. Hitzemann	Last Updated	2007-04-09 15:09:56		

References

Malmanger B, Lawler M, Coulombe S, Murray R, Cooper S, Polyakov Y, Belknap J, Hitzemann R. Further studies on using multiple-cross mapping (MCM) to map quantitative trait loci. Mamm Genome 2006 Dec;17(12):1193-204. Medline Link

Hitzemann R, Boudreau E and Malmanger B; unpublished data

Actre17

QTL Code	Actre17	PARC Alias		MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	19	Peak	24 cM	Range	
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score		p value		Sex Specific	
Strains Tested		Increaser Allele		Dominance	
Comments					
Contact Person	R. Hitzemann	Last Updated	2007-04-09 15:16:57		

References

Malmanger B, Lawler M, Coulombe S, Murray R, Cooper S, Polyakov Y, Belknap J, Hitzemann R. Further studies on using multiple-cross mapping (MCM) to map quantitative trait loci. Mamm Genome 2006 Dec;17(12):1193-204. Medline Link

Hitzemann R, Boudreau E and Malmanger B; unpublished data

Actre18

QTL Code	Actre18	PARC Alias		MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	X	Peak	33 cM	Range	
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score		p value		Sex Specific	
Strains Tested		Increaser Allele		Dominance	
Comments					
Contact Person	R. Hitzemann	Last Updated	2007-04-09 15:17:28		

References

Malmanger B, Lawler M, Coulombe S, Murray R, Cooper S, Polyakov Y, Belknap J, Hitzemann R. Further studies on using multiple-cross mapping (MCM) to map quantitative trait loci. Mamm Genome 2006 Dec;17(12):1193-204. Medline Link

Hitzemann R, Boudreau E and Malmanger B; unpublished data

Actre19

QTL Code	Actre19	PARC Alias		MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	X	Peak	50 cM	Range	
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score		p value		Sex Specific	
Strains Tested		Increaser Allele		Dominance	
Comments					
Contact Person	R. Hitzemann	Last Updated	2007-04-09 15:17:51		

References

Malmanger B, Lawler M, Coulombe S, Murray R, Cooper S, Polyakov Y, Belknap J, Hitzemann R. Further studies on using multiple-cross mapping (MCM) to map quantitative trait loci. Mamm Genome 2006 Dec;17(12):1193-204. Medline Link

Hitzemann R, Boudreau E and Malmanger B; unpublished data

Alcdpprov1

QTL Code	Alcdpprov1	PARC Alias	Calws	MGI Alias	
Drug	Alcohol	Phenotype	Chronic Alcohol Withdrawal		
Assay	Area under the curve for handling-induced convulsions over 25 hr period following 72 hr exposure to ethanol vapor				
Chromosome	13	Peak	37	Range	16-59
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score	2.9	p value	0.0003	Sex Specific	Male Limited
Strains Tested	BXD RI, B6D2 F2	Increaser Allele	D2	Dominance	
Comments					
Contact Person	K. Buck	Last Updated	2007-04-05 11:03:44		

References

Buck KJ, Rademacher BS, Metten P, Crabbe JC. Mapping murine loci for physical dependence on ethanol. Psychopharmacology (Berl). 2002 Apr;160(4):398-407. Epub 2002 Feb 15
Medline Link

Buck KJ, Finn DA. Genetic factors in addiction: QTL mapping and candidate gene studies implicate GABAergic genes in alcohol and barbiturate withdrawal in mice. Addiction. 2001 Jan;96(1):139-49.
Medline Link

Crabbe JC. Provisional mapping of quantitative trait loci for chronic ethanol withdrawal severity in BXD recombinant inbred mice. J Pharmacol Exp Ther. 1998 Jul;286(1):263-71.
Medline Link

Alcdpprov2

QTL Code	Alcdpprov2	PARC Alias	Calw4	MGI Alias	
Drug	Alcohol	Phenotype	Chronic Alcohol Withdrawal		
Assay	Area under the curve for handling-induced convulsions over 25 hr period following 72 hr exposure to ethanol vapor				
Chromosome	1	Peak	20	Range	12-35
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score	3.1	p value	1e-04	Sex Specific	
Strains Tested	BXD RI, B6D2 F2	Increaser Allele	B6	Dominance	
Comments					
Contact Person	K. Buck	Last Updated	2007-04-04 13:13:58		

References

Buck KJ, Rademacher BS, Metten P, Crabbe JC. Mapping murine loci for physical dependence on ethanol. Psychopharmacology (Berl). 2002 Apr;160(4):398-407. Epub 2002 Feb 15
Medline Link

Alcdpprov3

QTL Code	Alcdpprov3	PARC Alias	Calw5	MGI Alias	
Drug	Alcohol	Phenotype	Chronic Alcohol Withdrawal		
Assay	Area under the curve for handling-induced convulsions over 25 hr period following 72 hr exposure to ethanol vapor				
Chromosome	4	Peak	37	Range	30-44
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score	2.0	p value	0.003	Sex Specific	
Strains Tested	BXD RI, B6D2 F2	Increaser Allele	D2	Dominance	
Comments					
Contact Person	K. Buck	Last Updated	2007-04-04 13:22:55		

References

Buck KJ, Rademacher BS, Metten P, Crabbe JC. Mapping murine loci for physical dependence on ethanol. Psychopharmacology (Berl). 2002 Apr;160(4):398-407. Epub 2002 Feb 15
Medline Link

Crabbe JC. Provisional mapping of quantitative trait loci for chronic ethanol withdrawal severity in BXD recombinant inbred mice. J Pharmacol Exp Ther. 1998 Jul;286(1):263-71.
Medline Link

Alcp1

QTL Code	Alcp1	PARC Alias	Alcp1	MGI Alias	Alcp1
Drug	Alcohol	Phenotype	Alcohol Preference Drinking		
Assay					
Chromosome	2	Peak	28	Range	19-35
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score	5.3	p value		Sex Specific	
Strains Tested		Increaser Allele		Dominance	
Comments					
Contact Person	JA Melo	Last Updated	2007-04-05 12:29:20		

References

Belknap JK, Atkins AL. The replicability of QTLs for murine alcohol preference drinking behavior across eight independent studies. Mamm Genome. 2001 Dec;12(12):893-9.
Medline Link

Melo JA, Shendure J, Pociask K, Silver LM. Identification of sex-specific quantitative trait loci controlling alcohol preference in C57BL/ 6 mice. Nat Genet. 1996 Jun;13(2):147-53.
Medline Link

Alcw1

QTL Code	Alcw1	PARC Alias	Alcw1	MGI Alias	Alcw1
Drug	Alcohol	Phenotype	Acute Alcohol Withdrawal		
Assay	Area under the curve for handling-induced convulsions 2-12h after 4 g/kg ethanol injection				
Chromosome	1	Peak	96	Range	66-ter
Max Range (Mb)	172.3 - 174.0, 174.0 - 176.5	Min Range (Mb)	172.9 - 174.0, 174.0 - 176.3	Status	Significant
LOD score	5.6	p value	3e-07	Sex Specific	
Strains Tested	BXD RI, B6D2 F2, HAW/LAW	Increaser Allele	D2	Dominance	
Comments	Two qtls in this interval. Mb intervals based on congenics studies				
Contact Person	K. Buck	Last Updated	2007-04-04 13:08:20		

References

Kozell LM, Walter NAR, Hofstetter J, Belknap JK, Buck KJ. Fine mapping of sedative-hypnotic withdrawal loci on mouse chromosome 1. J Neurosci. Submitted.

Buck KJ, Finn DA. Genetic factors in addiction: QTL mapping and candidate gene studies implicate GABAergic genes in alcohol and barbiturate withdrawal in mice. Addiction. 2001 Jan;96(1):139-49.
Medline Link

Buck KJ, Metten P, Belknap JK, Crabbe JC. Quantitative trait loci involved in genetic predisposition to acute alcohol withdrawal in mice. J Neurosci. 1997 May 15;17(10):3946-55.
Medline Link

Kozell LM, Buck KJ; unpublished results

Alcw2

QTL Code	Alcw2	PARC Alias	Alcw2	MGI Alias	Alcw2
Drug	Alcohol	Phenotype	Acute Alcohol Withdrawal		
Assay	Area under the curve for handling-induced convulsions 2-12h after 4 g/kg ethanol injection				
Chromosome	4	Peak	38	Range	38-38.7
Max Range (Mb)	80.3 - 82.1	Min Range (Mb)	80.5 - 82.0	Status	Significant
LOD score	8.8	p value	2e-10	Sex Specific	
Strains Tested	BXD RI, B6D2 F2, HAW/LAW	Increaser Allele	D2	Dominance	
Comments	Mb intervals based on congenics studies				
Contact Person	K. Buck	Last Updated	2007-04-04 13:11:36		

References

Shirley RL, Walter NAR, Reilly MT, Fehr C, Buck, KJ. Mpdz is a quantitative trait gene for drug withdrawal seizures. Nat Neurosci. 2004 July; 7(7):699-700.
Medline Link

Fehr C, Shirley RL, Belknap JK, Crabbe JC, Buck KJ. Congenic mapping of alcohol and pentobarbital withdrawal liability loci to a <1 centimorgan interval of murine chromosome 4: identification of Mpdz as a candidate gene. J Neurosci. 2002 May 1;22(9):3730
Medline Link

Buck KJ, Finn DA. Genetic factors in addiction: QTL mapping and candidate gene studies implicate GABAergic genes in alcohol and barbiturate withdrawal in mice. Addiction. 2001 Jan;96(1):139-49.
Medline Link

Buck KJ, Metten P, Belknap JK, Crabbe JC. Quantitative trait loci involved in genetic predisposition to acute alcohol withdrawal in mice. J Neurosci. 1997 May 15;17(10):3946-55.
Medline Link

Alcw3

QTL Code	Alcw3	PARC Alias	Alcw3	MGI Alias	Alcw3
Drug	Alcohol	Phenotype	Acute Alcohol Withdrawal		
Assay	Area under the curve for handling-induced convulsions 2-12h after 4 g/kg ethanol injection				
Chromosome	11	Peak	20	Range	16-28
Max Range (Mb)	34.7 - 55.9	Min Range (Mb)	34.9 - 55.6	Status	Significant
LOD score	4.1	p value	1e-05	Sex Specific	
Strains Tested	BXD RI, B6D2 F2, HAW/LAW	Increaser Allele	D2	Dominance	
Comments	Mb intervals based on D1D2 SNP mapping				
Contact Person	K. Buck	Last Updated	2007-04-04 13:11:51		

References

Hood HM, Metten P, Crabbe JC, Buck KJ. Find mapping of a sedative-hypnotic drug withdrawal locus on mouse chromosome 11. Genes Brain Behav. 2006 Feb; 5(1):1-10.
Medline Link

Pletcher MT, McClurg P, Batalov S, Su AI, Barnes SW, Lagler E, Korstanje R, Wang X, Nusskern D, Bogue MA, Mural RJ, Paigen B, Wiltshire T. Use of a Dense Single Nucleotide Polymorphism Map for In Silico Mapping in the Mouse. PLoS Bio. 2004 Dec; 2(12):e393
Medline Link

Buck KJ, Finn DA. Genetic factors in addiction: QTL mapping and candidate gene studies implicate GABAergic genes in alcohol and barbiturate withdrawal in mice. Addiction. 2001 Jan;96(1):139-49.
Medline Link

Buck KJ, Metten P, Belknap JK, Crabbe JC. Quantitative trait loci involved in genetic predisposition to acute alcohol withdrawal in mice. J Neurosci. 1997 May 15;17(10):3946-55.
Medline Link

Alcw4

QTL Code	Alcw4	PARC Alias	Alcw4	MGI Alias	Alcw4
Drug	Alcohol	Phenotype	Acute Alcohol Withdrawal		
Assay	Area under the curve for handling-induced convulsions 2-12h after 4 g/kg ethanol injection				
Chromosome	2	Peak	38	Range	28-53
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score	2.3	p value	0.001	Sex Specific	
Strains Tested	BXD RI, B6D2 F2, HAW/LAW	Increaser Allele	D2	Dominance	
Comments					
Contact Person	K. Buck	Last Updated	2007-04-04 13:08:51		

References

Buck KJ, Finn DA. Genetic factors in addiction: QTL mapping and candidate gene studies implicate GABAergic genes in alcohol and barbiturate withdrawal in mice. Addiction. 2001 Jan;96(1):139-49.
Medline Link

Buck KJ, Metten P, Belknap JK, Crabbe JC. Quantitative trait loci involved in genetic predisposition to acute alcohol withdrawal in mice. J Neurosci. 1997 May 15;17(10):3946-55.
Medline Link

Alcw5

QTL Code	Alcw5		
Chromosome	2	Class	Alcohol
Peak	60 cM	Phenotype	Acute Alcohol Withdrawal
Range	ND cM	Assay	Area under the curve for handling-induced convulsions 2-12h after 4 g/kg ethanol injection
p Value	0.002	Strains Tested	BXD RI, B6D2 F2, HAW/LAW
LOD Score	2.1	Status	Suggestive

References

Buck KJ, Finn DA. Genetic factors in addiction: QTL mapping and candidate gene studies implicate GABAergic genes in alcohol and barbiturate withdrawal in mice. Addiction. 2001 Jan;96(1):139-49.
Medline Link

Buck KJ, Metten P, Belknap JK, Crabbe JC. Quantitative trait loci involved in genetic predisposition to acute alcohol withdrawal in mice. J Neurosci. 1997 May 15;17(10):3946-55.
Medline Link

Alcwprov1

QTL Code	Alcwprov1	PARC Alias	Alcw5	MGI Alias	
Drug	Alcohol	Phenotype	Acute Alcohol Withdrawal		
Assay	Area under the curve for handling-induced convulsions 2-12h after 4 g/kg ethanol injection				
Chromosome	2	Peak	60	Range	ND
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score	2.1	p value	0.002	Sex Specific	
Strains Tested	BXD RI, B6D2 F2, HAW/LAW	Increaser Allele	B6	Dominance	
Comments					
Contact Person	K. Buck	Last Updated	2007-04-04 13:10:20		

References

Buck KJ, Finn DA. Genetic factors in addiction: QTL mapping and candidate gene studies implicate GABAergic genes in alcohol and barbiturate withdrawal in mice. Addiction. 2001 Jan;96(1):139-49.
Medline Link

Buck KJ, Metten P, Belknap JK, Crabbe JC. Quantitative trait loci involved in genetic predisposition to acute alcohol withdrawal in mice. J Neurosci. 1997 May 15;17(10):3946-55.
Medline Link

Ap1q

QTL Code	Ap1q	PARC Alias	Ap1q	MGI Alias	Ap1q
Drug	Alcohol	Phenotype	Alcohol Preference Drinking		
Assay					
Chromosome	1	Peak	76	Range	45-95
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score	4.5	p value		Sex Specific	
Strains Tested	BXD RI, B6D2 F2	Increaser Allele	B6	Dominance	B6 dominant
Comments	QTL was NOT captured in a congenic with minimal interval of 152.1 - 176.5. However this does not co				
Contact Person	LM Tarantino	Last Updated	2007-04-05 14:14:07		

References

Tarantino LM, McClearn GE, Rodriguez LA, Plomin R. Confirmation of quantitative trait loci for alcohol preference in mice. Alcohol Clin Exp Res. 1998 Aug;22(5):1099-105.
Medline Link

Phillips TJ; unpublished data

Ap2q

QTL Code	Ap2q	PARC Alias	Ap2q	MGI Alias	Ap2q
Drug	Alcohol	Phenotype	Alcohol Preference Drinking		
Assay					
Chromosome	2	Peak	40	Range	30-50
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score	3.1	p value		Sex Specific	
Strains Tested	BXD RI, B6D2 F2	Increaser Allele		Dominance	
Comments					
Contact Person	LM Tarantino	Last Updated	2007-04-05 13:34:12		

References

Belknap JK, Atkins AL. The replicability of QTLs for murine alcohol preference drinking behavior across eight independent studies. Mamm Genome. 2001 Dec;12(12):893-9.
Medline Link

Tarantino LM, McClearn GE, Rodriguez LA, Plomin R. Confirmation of quantitative trait loci for alcohol preference in mice. Alcohol Clin Exp Res. 1998 Aug;22(5):1099-105.
Medline Link

Ap3q

QTL Code	Ap3q	PARC Alias	Ap3q	MGI Alias	Ap3q
Drug	Alcohol	Phenotype	Alcohol Preference Drinking		
Assay					
Chromosome	4	Peak	75	Range	65-ter
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score	4.6	p value		Sex Specific	
Strains Tested	BXD RI, B6D2 F2	Increaser Allele	B6	Dominance	B6 dominant or additive
Comments					
Contact Person	LM Tarantino	Last Updated	2007-04-05 14:06:21		

References

Belknap JK, Atkins AL. The replicability of QTLs for murine alcohol preference drinking behavior across eight independent studies. Mamm Genome. 2001 Dec;12(12):893-9.
Medline Link

Tarantino LM, McClearn GE, Rodriguez LA, Plomin R. Confirmation of quantitative trait loci for alcohol preference in mice. Alcohol Clin Exp Res. 1998 Aug;22(5):1099-105.
Medline Link

Ap4q

QTL Code	Ap4q	PARC Alias	Ap4q	MGI Alias	Ap4q
Drug	Alcohol	Phenotype	Alcohol Preference Drinking		
Assay					
Chromosome	10	Peak	28	Range	18-57
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score	3.2	p value		Sex Specific	
Strains Tested	BXD RI, B6D2 F2	Increaser Allele		Dominance	
Comments					
Contact Person	LM Tarantino	Last Updated	2007-04-05 14:11:59		

References

Tarantino LM, McClearn GE, Rodriguez LA, Plomin R. Confirmation of quantitative trait loci for alcohol preference in mice. Alcohol Clin Exp Res. 1998 Aug;22(5):1099-105.
Medline Link

Ap5q

QTL Code	Ap5q	PARC Alias	Ap5q	MGI Alias	Ap5q
Drug	Alcohol	Phenotype	Alcohol Preference Drinking		
Assay					
Chromosome	9	Peak	25	Range	10-35
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score	4.8	p value		Sex Specific	
Strains Tested	BXD RI, B6D2 F2	Increaser Allele	B6	Dominance	B6 dominant or additive
Comments					
Contact Person	LM Tarantino	Last Updated	2007-04-05 14:07:46		

References

Belknap JK, Atkins AL. The replicability of QTLs for murine alcohol preference drinking behavior across eight independent studies. Mamm Genome. 2001 Dec;12(12):893-9.
Medline Link

Tarantino LM, McClearn GE, Rodriguez LA, Plomin R. Confirmation of quantitative trait loci for alcohol preference in mice. Alcohol Clin Exp Res. 1998 Aug;22(5):1099-105.
Medline Link

Ap6q

QTL Code	Ap6q	PARC Alias	Ap6q	MGI Alias	Ap6q
Drug	Alcohol	Phenotype	Alcohol Preference Drinking		
Assay					
Chromosome	3	Peak	45	Range	38-60
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score	3.4	p value		Sex Specific	
Strains Tested	BXD RI, B6D2 F2	Increaser Allele		Dominance	
Comments					
Contact Person	LM Tarantino	Last Updated	2007-04-05 13:34:59		

References

Belknap JK, Atkins AL. The replicability of QTLs for murine alcohol preference drinking behavior across eight independent studies. Mamm Genome. 2001 Dec;12(12):893-9.
Medline Link

Tarantino LM, McClearn GE, Rodriguez LA, Plomin R. Confirmation of quantitative trait loci for alcohol preference in mice. Alcohol Clin Exp Res. 1998 Aug;22(5):1099-105.
Medline Link

Calw1

QTL Code	Calw1		
Chromosome	1	Class	Alcohol
Peak	96 cM	Phenotype	Chronic Alcohol Withdrawal
Range	89-106.3 cM	Assay	Area under the curve for handling-induced convulsions over 25 hr period following 72 hr exposure to ethanol vapor
p Value	2e-09	Strains Tested	BXD RI, B6D2F2, congenics
LOD Score	7.6	Status	Significant

References

Buck KJ, Rademacher BS, Metten P, Crabbe JC. Mapping murine loci for physical dependence on ethanol. Psychopharmacology (Berl). 2002 Apr;160(4):398-407. Epub 2002 Feb 15
Medline Link

Buck KJ, Finn DA. Genetic factors in addiction: QTL mapping and candidate gene studies implicate GABAergic genes in alcohol and barbiturate withdrawal in mice. Addiction. 2001 Jan;96(1):139-49.
Medline Link

Crabbe JC. Provisional mapping of quantitative trait loci for chronic ethanol withdrawal severity in BXD recombinant inbred mice. J Pharmacol Exp Ther. 1998 Jul;286(1):263-71.
Medline Link

Calw1/Alcdp1

QTL Code	Calw1/Alcdp1	PARC Alias	Calw1	MGI Alias	Alcdp1
Drug	Alcohol	Phenotype	Chronic Alcohol Withdrawal		
Assay	Area under the curve for handling-induced convulsions over 25 hr period following 72 hr exposure to ethanol vapor				
Chromosome	1	Peak	96	Range	89-106.3
Max Range (Mb)	172.3 - 191.3	Min Range (Mb)	172.9 - 186.9	Status	Significant
LOD score	7.6	p value	2e-09	Sex Specific	
Strains Tested	BXD RI, B6D2F2, congenics	Increaser Allele	D2	Dominance	
Comments	Mb intervals based on congenics studies				
Contact Person	K. Buck	Last Updated	2007-04-04 13:20:40		

References

Buck KJ, Rademacher BS, Metten P, Crabbe JC. Mapping murine loci for physical dependence on ethanol. Psychopharmacology (Berl). 2002 Apr;160(4):398-407. Epub 2002 Feb 15
Medline Link

Buck KJ, Finn DA. Genetic factors in addiction: QTL mapping and candidate gene studies implicate GABAergic genes in alcohol and barbiturate withdrawal in mice. Addiction. 2001 Jan;96(1):139-49.
Medline Link

Crabbe JC. Provisional mapping of quantitative trait loci for chronic ethanol withdrawal severity in BXD recombinant inbred mice. J Pharmacol Exp Ther. 1998 Jul;286(1):263-71.
Medline Link

Kozell LM, Buck KJ; unpublished results

Calw2

QTL Code	Calw2		
Chromosome	19	Class	Alcohol
Peak	47 cM	Phenotype	Chronic Alcohol Withdrawal
Range	36.5-ter cM	Assay	Area under the curve for handling-induced convulsions over 25 hr period following 72 hr exposure to ethanol vapor
p Value	6e-07	Strains Tested	BXD RI, B6D2 F2
LOD Score	5.3	Status	Significant

References

Buck KJ, Rademacher BS, Metten P, Crabbe JC. Mapping murine loci for physical dependence on ethanol. Psychopharmacology (Berl). 2002 Apr;160(4):398-407. Epub 2002 Feb 15
Medline Link

Buck KJ, Finn DA. Genetic factors in addiction: QTL mapping and candidate gene studies implicate GABAergic genes in alcohol and barbiturate withdrawal in mice. Addiction. 2001 Jan;96(1):139-49.
Medline Link

Crabbe JC. Provisional mapping of quantitative trait loci for chronic ethanol withdrawal severity in BXD recombinant inbred mice. J Pharmacol Exp Ther. 1998 Jul;286(1):263-71.
Medline Link

Calw2/Alcdp2

QTL Code	Calw2/Alcdp2	PARC Alias	Calw2	MGI Alias	Alcdp2
Drug	Alcohol	Phenotype	Chronic Alcohol Withdrawal		
Assay	Area under the curve for handling-induced convulsions over 25 hr period following 72 hr exposure to ethanol vapor				
Chromosome	19	Peak	47	Range	36.5-ter
Max Range (Mb)	10.4 - 55.2	Min Range (Mb)	12.3 - 54.8	Status	Significant
LOD score	5.3	p value	6e-07	Sex Specific	
Strains Tested	BXD RI, B6D2 F2	Increaser Allele	D2	Dominance	
Comments	Mb intervals based on congenics studies				
Contact Person	K. Buck	Last Updated	2007-04-05 11:06:28		

References

Buck KJ, Rademacher BS, Metten P, Crabbe JC. Mapping murine loci for physical dependence on ethanol. Psychopharmacology (Berl). 2002 Apr;160(4):398-407. Epub 2002 Feb 15
Medline Link

Buck KJ, Finn DA. Genetic factors in addiction: QTL mapping and candidate gene studies implicate GABAergic genes in alcohol and barbiturate withdrawal in mice. Addiction. 2001 Jan;96(1):139-49.
Medline Link

Crabbe JC. Provisional mapping of quantitative trait loci for chronic ethanol withdrawal severity in BXD recombinant inbred mice. J Pharmacol Exp Ther. 1998 Jul;286(1):263-71.
Medline Link

Shirley RL, Buck KJ; unpublished data

Calw3

QTL Code	Calw3		
Chromosome	13	Class	Alcohol
Peak	37 cM	Phenotype	Chronic Alcohol Withdrawal
Range	16-59 cM	Assay	Area under the curve for handling-induced convulsions over 25 hr period following 72 hr exposure to ethanol vapor
p Value	0.0003	Strains Tested	BXD RI, B6D2 F2
LOD Score	2.9	Status	Suggestive

References

Buck KJ, Rademacher BS, Metten P, Crabbe JC. Mapping murine loci for physical dependence on ethanol. Psychopharmacology (Berl). 2002 Apr;160(4):398-407. Epub 2002 Feb 15
Medline Link

Buck KJ, Finn DA. Genetic factors in addiction: QTL mapping and candidate gene studies implicate GABAergic genes in alcohol and barbiturate withdrawal in mice. Addiction. 2001 Jan;96(1):139-49.
Medline Link

Crabbe JC. Provisional mapping of quantitative trait loci for chronic ethanol withdrawal severity in BXD recombinant inbred mice. J Pharmacol Exp Ther. 1998 Jul;286(1):263-71.
Medline Link

Calw4

QTL Code	Calw4		
Chromosome	1	Class	Alcohol
Peak	20 cM	Phenotype	Chronic Alcohol Withdrawal
Range	12-35 cM	Assay	Area under the curve for handling-induced convulsions over 25 hr period following 72 hr exposure to ethanol vapor
p Value	0.0001	Strains Tested	BXD RI, B6D2 F2
LOD Score	3.1	Status	Suggestive

References

Buck KJ, Rademacher BS, Metten P, Crabbe JC. Mapping murine loci for physical dependence on ethanol. Psychopharmacology (Berl). 2002 Apr;160(4):398-407. Epub 2002 Feb 15
Medline Link

Calw5

QTL Code	Calw5		
Chromosome	4	Class	Alcohol
Peak	37 cM	Phenotype	Chronic Alcohol Withdrawal
Range	30-44 cM	Assay	Area under the curve for handling-induced convulsions over 25 hr period following 72 hr exposure to ethanol vapor
p Value	0.003	Strains Tested	BXD RI, B6D2 F2
LOD Score	2.0	Status	Suggestive

References

Buck KJ, Rademacher BS, Metten P, Crabbe JC. Mapping murine loci for physical dependence on ethanol. Psychopharmacology (Berl). 2002 Apr;160(4):398-407. Epub 2002 Feb 15
Medline Link

Crabbe JC. Provisional mapping of quantitative trait loci for chronic ethanol withdrawal severity in BXD recombinant inbred mice. J Pharmacol Exp Ther. 1998 Jul;286(1):263-71.
Medline Link

Caws1

QTL Code	Caws1		
Chromosome	1	Class	Alcohol
Peak		Phenotype	Chronic Alcohol Withdrawal
Range	28-47 cM	Assay	Area under the curve for handling-induced convulsions over 25 hr period following 72 hr exposure to ethanol vapor
p Value	3e-07	Strains Tested	IWSP-2 x IWSR-1 F2
LOD Score	6.5	Status	Significant

References

Bergeson SE, Kyle Warren R, Crabbe JC, Metten P, Gene Erwin V, Belknap JK. Chromosomal loci influencing chronic alcohol withdrawal severity. Mamm Genome. 2003 Jul;14(7):454-63.
Medline Link

Caws1/Alcw5

QTL Code	Caws1/Alcw5	PARC Alias	Caws1	MGI Alias	Alcw5
Drug	Alcohol	Phenotype	Chronic Alcohol Withdrawal		
Assay	Area under the curve for handling-induced convulsions over 25 hr period following 72 hr exposure to ethanol vapor				
Chromosome	1	Peak		Range	28-47
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score	6.5	p value	3e-07	Sex Specific	
Strains Tested	IWSP-2 x IWSR-1 F2	Increaser Allele	P	Dominance	Partial, R allele
Comments					
Contact Person	J. Belknap	Last Updated	2007-04-04 13:16:03		

References

Bergeson SE, Kyle Warren R, Crabbe JC, Metten P, Gene Erwin V, Belknap JK. Chromosomal loci influencing chronic alcohol withdrawal severity. Mamm Genome. 2003 Jul;14(7):454-63.
Medline Link

Caws2

QTL Code	Caws2	PARC Alias	Caws2	MGI Alias	
Drug	Alcohol	Phenotype	Chronic Alcohol Withdrawal		
Assay	Area under the curve for handling-induced convulsions over 25 hr period following 72 hr exposure to ethanol vapor				
Chromosome	4	Peak		Range	33-51
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score	2.3	p value	0.005	Sex Specific	
Strains Tested	IWSP-2 x IWSR-1 F2	Increaser Allele	P	Dominance	Overdom, P allele
Comments					
Contact Person	J. Belknap	Last Updated	2007-04-04 13:23:53		

References

Bergeson SE, Kyle Warren R, Crabbe JC, Metten P, Gene Erwin V, Belknap JK. Chromosomal loci influencing chronic alcohol withdrawal severity. Mamm Genome. 2003 Jul;14(7):454-63.
Medline Link

Caws3

QTL Code	Caws3		
Chromosome	8	Class	Alcohol
Peak		Phenotype	Chronic Alcohol Withdrawal
Range	16-43 cM	Assay	Area under the curve for handling-induced convulsions over 25 hr period following 72 hr exposure to ethanol vapor
p Value	0.0003	Strains Tested	IWSP-2 x IWSR-1 F2
LOD Score	3.5	Status	Significant

References

Bergeson SE, Kyle Warren R, Crabbe JC, Metten P, Gene Erwin V, Belknap JK. Chromosomal loci influencing chronic alcohol withdrawal severity. Mamm Genome. 2003 Jul;14(7):454-63.
Medline Link

Caws4

QTL Code	Caws4		
Chromosome	11	Class	Alcohol
Peak		Phenotype	Chronic Alcohol Withdrawal
Range	15-36 cM	Assay	Area under the curve for handling-induced convulsions over 25 hr period following 72 hr exposure to ethanol vapor
p Value	2e-07	Strains Tested	IWSP-2 x IWSR-1 F2
LOD Score	6.7	Status	Significant

References

Bergeson SE, Kyle Warren R, Crabbe JC, Metten P, Gene Erwin V, Belknap JK. Chromosomal loci influencing chronic alcohol withdrawal severity. Mamm Genome. 2003 Jul;14(7):454-63.
Medline Link

Caws4/Alcw3

QTL Code	Caws4/Alcw3	PARC Alias	Caws4	MGI Alias	Alcw3
Drug	Alcohol	Phenotype	Chronic Alcohol Withdrawal		
Assay	Area under the curve for handling-induced convulsions over 25 hr period following 72 hr exposure to ethanol vapor				
Chromosome	11	Peak		Range	15-36
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score	6.7	p value	2e-07	Sex Specific	Stronger in males
Strains Tested	IWSP-2 x IWSR-1 F2	Increaser Allele	P	Dominance	Partial, R allele
Comments					
Contact Person	J. Belknap	Last Updated	2007-04-05 11:00:08		

References

Bergeson SE, Kyle Warren R, Crabbe JC, Metten P, Gene Erwin V, Belknap JK. Chromosomal loci influencing chronic alcohol withdrawal severity. Mamm Genome. 2003 Jul;14(7):454-63.
Medline Link

Caws5

QTL Code	Caws5		
Chromosome	14	Class	Alcohol
Peak		Phenotype	Chronic Alcohol Withdrawal
Range	24-48 cM	Assay	Area under the curve for handling-induced convulsions over 25 hr period following 72 hr exposure to ethanol vapor
p Value	6e-05	Strains Tested	IWSP-2 x IWSR-1 F2
LOD Score	4.2	Status	Significant

References

Bergeson SE, Kyle Warren R, Crabbe JC, Metten P, Gene Erwin V, Belknap JK. Chromosomal loci influencing chronic alcohol withdrawal severity. Mamm Genome. 2003 Jul;14(7):454-63.
Medline Link

Caws5/Alcw7

QTL Code	Caws5/Alcw7	PARC Alias	Caws5	MGI Alias	Alcw7
Drug	Alcohol	Phenotype	Chronic Alcohol Withdrawal		
Assay	Area under the curve for handling-induced convulsions over 25 hr period following 72 hr exposure to ethanol vapor				
Chromosome	14	Peak		Range	24-48
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score	4.2	p value	6e-05	Sex Specific	
Strains Tested	IWSP-2 x IWSR-1 F2	Increaser Allele	P	Dominance	None
Comments					
Contact Person	J. Belknap	Last Updated	2007-04-05 11:05:01		

References

Bergeson SE, Kyle Warren R, Crabbe JC, Metten P, Gene Erwin V, Belknap JK. Chromosomal loci influencing chronic alcohol withdrawal severity. Mamm Genome. 2003 Jul;14(7):454-63.
Medline Link

Et2bec1

QTL Code	Et2bec1		
Chromosome	17	Class	Alcohol
Peak	6.27 cM	Phenotype	Acute Ethanol Metabolism
Range		Assay	BEC at 60 min after 2 g/kg ethanol
p Value	0.00013	Strains Tested	B6, D2, BXD RI
LOD Score		Status	Suggestive

References

Grisel JE, Metten P, Wenger CD, Merrill CM, Crabbe JC. Mapping of quantitative trait loci underlying ethanol metabolism in BXD recombinant inbred mouse strains. Alcohol Clin Exp Res. 2002 May;26(5):610-6.
Medline Link

Et2becprov1

QTL Code	Et2becprov1	PARC Alias	Et2bec1	MGI Alias	
Drug	Alcohol	Phenotype	Acute Ethanol Metabolism		
Assay	BEC at 60 min after 2 g/kg ethanol				
Chromosome	17	Peak	6.27	Range	
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score		p value	0.00013	Sex Specific	
Strains Tested	B6, D2, BXD RI	Increaser Allele	B6	Dominance	
Comments					
Contact Person	J. Crabbe	Last Updated	2007-04-10 12:33:43		

References

Grisel JE, Metten P, Wenger CD, Merrill CM, Crabbe JC. Mapping of quantitative trait loci underlying ethanol metabolism in BXD recombinant inbred mouse strains. Alcohol Clin Exp Res. 2002 May;26(5):610-6.
Medline Link

Et2met1

QTL Code	Et2met1		
Chromosome	17	Class	Alcohol
Peak	6.27 cM	Phenotype	Acute Ethanol Metabolism
Range		Assay	Metabolic rate after 2 g/kg ethanol
p Value	6.95e-06	Strains Tested	B6, D2, BXD RI
LOD Score		Status	Significant

References

Grisel JE, Metten P, Wenger CD, Merrill CM, Crabbe JC. Mapping of quantitative trait loci underlying ethanol metabolism in BXD recombinant inbred mouse strains. Alcohol Clin Exp Res. 2002 May;26(5):610-6.
Medline Link

Et2met1/Etmr

QTL Code	Et2met1/Etmr	PARC Alias	Et2met1	MGI Alias	Etmr
Drug	Alcohol	Phenotype	Acute Ethanol Metabolism		
Assay	Metabolic rate after 2 g/kg ethanol				
Chromosome	17	Peak	6.27	Range	
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score		p value	6.95e-06	Sex Specific	
Strains Tested	B6, D2, BXD RI	Increaser Allele	D2	Dominance	
Comments					
Contact Person	J. Crabbe	Last Updated	2007-04-10 12:32:04		

References

Grisel JE, Metten P, Wenger CD, Merrill CM, Crabbe JC. Mapping of quantitative trait loci underlying ethanol metabolism in BXD recombinant inbred mouse strains. Alcohol Clin Exp Res. 2002 May;26(5):610-6.
Medline Link

Et2met2

QTL Code	Et2met2		
Chromosome	3	Class	Alcohol
Peak	49 cM	Phenotype	Acute Ethanol Metabolism
Range		Assay	Metabolic rate after 2 g/kg ethanol
p Value	0.001	Strains Tested	B6, D2, BXD RI
LOD Score		Status	Suggestive

References

Grisel JE, Metten P, Wenger CD, Merrill CM, Crabbe JC. Mapping of quantitative trait loci underlying ethanol metabolism in BXD recombinant inbred mouse strains. Alcohol Clin Exp Res. 2002 May;26(5):610-6.
Medline Link

Et2metprov1

QTL Code	Et2metprov1	PARC Alias	Et2met2	MGI Alias	
Drug	Alcohol	Phenotype	Acute Ethanol Metabolism		
Assay	Metabolic rate after 2 g/kg ethanol				
Chromosome	3	Peak	49	Range	
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score		p value	0.001	Sex Specific	
Strains Tested	B6, D2, BXD RI	Increaser Allele	D2	Dominance	
Comments					
Contact Person	J. Crabbe	Last Updated	2007-04-10 12:27:53		

References

Grisel JE, Metten P, Wenger CD, Merrill CM, Crabbe JC. Mapping of quantitative trait loci underlying ethanol metabolism in BXD recombinant inbred mouse strains. Alcohol Clin Exp Res. 2002 May;26(5):610-6.
Medline Link

Et3bec1

QTL Code	Et3bec1		
Chromosome	17	Class	Alcohol
Peak	6.27 cM	Phenotype	Acute Ethanol Metabolism
Range		Assay	BEC at 60 min after 3 g/kg ethanol
p Value	0.00074	Strains Tested	B6, D2, BXD RI
LOD Score		Status	Suggestive

References

Grisel JE, Metten P, Wenger CD, Merrill CM, Crabbe JC. Mapping of quantitative trait loci underlying ethanol metabolism in BXD recombinant inbred mouse strains. Alcohol Clin Exp Res. 2002 May;26(5):610-6.
Medline Link

Et3bec2

QTL Code	Et3bec2		
Chromosome	15	Class	Alcohol
Peak	39 cM	Phenotype	Acute Ethanol Metabolism
Range		Assay	BEC at 60 min. after 2 g/kg ethanol
p Value	0.001	Strains Tested	B6, D2, BXD RI
LOD Score		Status	Suggestive

References

Grisel JE, Metten P, Wenger CD, Merrill CM, Crabbe JC. Mapping of quantitative trait loci underlying ethanol metabolism in BXD recombinant inbred mouse strains. Alcohol Clin Exp Res. 2002 May;26(5):610-6.
Medline Link

Et3bec3

QTL Code	Et3bec3		
Chromosome	12	Class	Alcohol
Peak	52 cM	Phenotype	Acute Ethanol Metabolism
Range		Assay	BEC at 60 min. after 3 g/kg ethanol
p Value	0.001	Strains Tested	B6, D2, BXD RI
LOD Score		Status	Suggestive

References

Grisel JE, Metten P, Wenger CD, Merrill CM, Crabbe JC. Mapping of quantitative trait loci underlying ethanol metabolism in BXD recombinant inbred mouse strains. Alcohol Clin Exp Res. 2002 May;26(5):610-6.
Medline Link

Et3becprov1

QTL Code	Et3becprov1	PARC Alias	Et3bec3	MGI Alias	
Drug	Alcohol	Phenotype	Acute Ethanol Metabolism		
Assay	BEC at 60 min. after 3 g/kg ethanol				
Chromosome	12	Peak	52	Range	
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score		p value	0.001	Sex Specific	
Strains Tested	B6, D2, BXD RI	Increaser Allele	B6	Dominance	
Comments					
Contact Person	J. Crabbe	Last Updated	2007-04-10 12:28:41		

References

Grisel JE, Metten P, Wenger CD, Merrill CM, Crabbe JC. Mapping of quantitative trait loci underlying ethanol metabolism in BXD recombinant inbred mouse strains. Alcohol Clin Exp Res. 2002 May;26(5):610-6.
Medline Link

Et3becprov2

QTL Code	Et3becprov2	PARC Alias	Et3bec2	MGI Alias	
Drug	Alcohol	Phenotype	Acute Ethanol Metabolism		
Assay	BEC at 60 min. after 2 g/kg ethanol				
Chromosome	15	Peak	39	Range	
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score		p value	0.001	Sex Specific	
Strains Tested	B6, D2, BXD RI	Increaser Allele		Dominance	
Comments					
Contact Person	J. Crabbe	Last Updated	2007-04-10 12:30:12		

References

Grisel JE, Metten P, Wenger CD, Merrill CM, Crabbe JC. Mapping of quantitative trait loci underlying ethanol metabolism in BXD recombinant inbred mouse strains. Alcohol Clin Exp Res. 2002 May;26(5):610-6.
Medline Link

Et3becprov3

QTL Code	Et3becprov3	PARC Alias	Et3bec1	MGI Alias	
Drug	Alcohol	Phenotype	Acute Ethanol Metabolism		
Assay	BEC at 60 min after 3 g/kg ethanol				
Chromosome	17	Peak	6.27	Range	
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score		p value	0.00074	Sex Specific	
Strains Tested	B6, D2, BXD RI	Increaser Allele	B6	Dominance	
Comments					
Contact Person	J. Crabbe	Last Updated	2007-04-10 12:34:17		

References

Grisel JE, Metten P, Wenger CD, Merrill CM, Crabbe JC. Mapping of quantitative trait loci underlying ethanol metabolism in BXD recombinant inbred mouse strains. Alcohol Clin Exp Res. 2002 May;26(5):610-6.
Medline Link

Et3met1

QTL Code	Et3met1		
Chromosome	17	Class	Alcohol
Peak	6.27 cM	Phenotype	Acute Ethanol Metabolism
Range		Assay	Metabolic rate after 3 g/kg ethanol
p Value	7.83e-05	Strains Tested	B6, D2, BXD RI
LOD Score		Status	Significant

References

Grisel JE, Metten P, Wenger CD, Merrill CM, Crabbe JC. Mapping of quantitative trait loci underlying ethanol metabolism in BXD recombinant inbred mouse strains. Alcohol Clin Exp Res. 2002 May;26(5):610-6.
Medline Link

Et3met1/Etmr

QTL Code	Et3met1/Etmr	PARC Alias	Et3met1	MGI Alias	Etmr
Drug	Alcohol	Phenotype	Acute Ethanol Metabolism		
Assay	Metabolic rate after 3 g/kg ethanol				
Chromosome	17	Peak	6.27	Range	
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score		p value	7.83e-05	Sex Specific	
Strains Tested	B6, D2, BXD RI	Increaser Allele	D2	Dominance	
Comments					
Contact Person	J. Crabbe	Last Updated	2007-04-10 12:32:34		

References

Grisel JE, Metten P, Wenger CD, Merrill CM, Crabbe JC. Mapping of quantitative trait loci underlying ethanol metabolism in BXD recombinant inbred mouse strains. Alcohol Clin Exp Res. 2002 May;26(5):610-6.
Medline Link

Et3met2

QTL Code	Et3met2		
Chromosome	1	Class	Alcohol
Peak	102 cM	Phenotype	Acute Ethanol Metabolism
Range		Assay	Metabolic rate after 3 g/kg ethanol
p Value	0.001	Strains Tested	B6, D2, BXD RI
LOD Score		Status	Suggestive

References

Grisel JE, Metten P, Wenger CD, Merrill CM, Crabbe JC. Mapping of quantitative trait loci underlying ethanol metabolism in BXD recombinant inbred mouse strains. Alcohol Clin Exp Res. 2002 May;26(5):610-6.
Medline Link

Et3metprov1

QTL Code	Et3metprov1	PARC Alias	Et3met2	MGI Alias	
Drug	Alcohol	Phenotype	Acute Ethanol Metabolism		
Assay	Metabolic rate after 3 g/kg ethanol				
Chromosome	1	Peak	102	Range	
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score		p value	0.001	Sex Specific	
Strains Tested	B6, D2, BXD RI	Increaser Allele	B6	Dominance	
Comments					
Contact Person	J. Crabbe	Last Updated	2007-04-10 12:27:12		

References

Grisel JE, Metten P, Wenger CD, Merrill CM, Crabbe JC. Mapping of quantitative trait loci underlying ethanol metabolism in BXD recombinant inbred mouse strains. Alcohol Clin Exp Res. 2002 May;26(5):610-6.
Medline Link

Etacc

QTL Code	Etacc		
Chromosome	15	Class	Alcohol
Peak	30 cM	Phenotype	Alcohol Acceptance
Range	15-48 cM	Assay	Total amount of 10% (v/v) ethanol consumed over 24-h period following 24-h period of water deprivation
p Value		Strains Tested	B6, D2, BXD RI, B6D2 F2
LOD Score	3.8	Status	Significant

References

McClearn GE, Tarantino LM, Rodriguez LA, Jones BC, Blizard DA, Plomin R. Genotypic selection provides experimental confirmation for an alcohol consumption quantitative trait locus in mouse. Mol Psychiatry. 1997 Oct-Nov;2(6):486-9.
Medline Link

Etact1

QTL Code	Etact1	PARC Alias		MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	2	Peak	51 cM	Range	41-61
Max Range (Mb)	20.2 - 153.3	Min Range (Mb)	37.5 - 130.8	Status	Significant
LOD score	3.9	p value	2.2e-05	Sex Specific	
Strains Tested	BXD RI, B6D2 F2	Increaser Allele		Dominance	
Comments	Mb intervals based on congenics studies				
Contact Person	T. Phillips	Last Updated	2007-04-09 13:48:24		

References

Palmer AA, Lessov-Schlaggar CN, Ponder CA, McKinnon CS, Phillips TJ. Sensitivity to the locomotor-stimulant effects of ethanol and allopregnanolone: a quantitative trait locus study of common genetic influence. Genes Brain Behav. 2006 Oct;5(7):506-17.
Medline Link

Phillips TJ, Huson M, Gwiazdon C, Burkhart-Kasch S, Shen EH. Effects of acute and repeated ethanol exposures on the locomotor activity of BXD recombinant inbred mice. Alcohol Clin Exp Res. 1995 Apr;19(2):269-78.
Medline Link

Etact2

QTL Code	Etact2	PARC Alias		MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	9	Peak	113.5 Mb	Range	51-71 cM
Max Range (Mb)	0 - 124	Min Range (Mb)	32.6 - 101.4	Status	Significant
LOD score	3.6	p value	4.3e-05	Sex Specific	
Strains Tested	BXD RI, B6D2 F2	Increaser Allele		Dominance	
Comments	Mb intervals based on congenics studies				
Contact Person	T. Phillips	Last Updated	2007-04-09 14:54:31		

References

Palmer AA, Lessov-Schlaggar CN, Ponder CA, McKinnon CS, Phillips TJ. Sensitivity to the locomotor-stimulant effects of ethanol and allopregnanolone: a quantitative trait locus study of common genetic influence. Genes Brain Behav. 2006 Oct;5(7):506-17.
Medline Link

Phillips TJ, Huson M, Gwiazdon C, Burkhart-Kasch S, Shen EH. Effects of acute and repeated ethanol exposures on the locomotor activity of BXD recombinant inbred mice. Alcohol Clin Exp Res. 1995 Apr;19(2):269-78.
Medline Link

Kamens HM, Phillips TJ; unpublished data

Etact3

QTL Code	Etact3	PARC Alias		MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	1	Peak	62.6 Mb	Range	
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score	0.0	p value	0	Sex Specific	
Strains Tested	BXD RI, B6D2 F2	Increaser Allele		Dominance	
Comments					
Contact Person	T. Phillips	Last Updated	2007-04-09 13:37:52		

References

Etact4

QTL Code	Etact4		
Chromosome	3	Class	Alcohol
Peak	19 cM	Phenotype	Ethanol-Stimulated Activity
Range	9-29 cM	Assay	
p Value	0.0027	Strains Tested	BXD RI, B6D2 F2
LOD Score	2.0	Status	Suggestive

References

Phillips TJ, Huson M, Gwiazdon C, Burkhart-Kasch S, Shen EH. Effects of acute and repeated ethanol exposures on the locomotor activity of BXD recombinant inbred mice. Alcohol Clin Exp Res. 1995 Apr;19(2):269-78.
Medline Link

Etactprov1

QTL Code	Etactprov1	PARC Alias	Etact3	MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	2	Peak		Range	73 - 93 cM
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score		p value		Sex Specific	
Strains Tested		Increaser Allele		Dominance	
Comments					
Contact Person	T. Phillips	Last Updated	2007-04-09 13:58:53		

References

Palmer AA, Lessov-Schlaggar CN, Ponder CA, McKinnon CS, Phillips TJ. Sensitivity to the locomotor-stimulant effects of ethanol and allopregnanolone: a quantitative trait locus study of common genetic influence. Genes Brain Behav. 2006 Oct;5(7):506-17.
Medline Link

Phillips TJ, Huson M, Gwiazdon C, Burkhart-Kasch S, Shen EH. Effects of acute and repeated ethanol exposures on the locomotor activity of BXD recombinant inbred mice. Alcohol Clin Exp Res. 1995 Apr;19(2):269-78.
Medline Link

Etactprov2

QTL Code	Etactprov2	PARC Alias	Etact4	MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	3	Peak	19 cM	Range	9-29
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score	2.0	p value	0.0027	Sex Specific	
Strains Tested	BXD RI, B6D2 F2	Increaser Allele		Dominance	
Comments					
Contact Person	T. Phillips	Last Updated	2007-04-09 14:02:16		

References

Phillips TJ, Huson M, Gwiazdon C, Burkhart-Kasch S, Shen EH. Effects of acute and repeated ethanol exposures on the locomotor activity of BXD recombinant inbred mice. Alcohol Clin Exp Res. 1995 Apr;19(2):269-78.
Medline Link

Etactprov3

QTL Code	Etactprov3	PARC Alias		MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	3	Peak	18.8 Mb	Range	
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score		p value		Sex Specific	
Strains Tested		Increaser Allele		Dominance	
Comments					
Contact Person	T. Phillips	Last Updated	2007-04-09 14:05:09		

References

Palmer AA, Lessov-Schlaggar CN, Ponder CA, McKinnon CS, Phillips TJ. Sensitivity to the locomotor-stimulant effects of ethanol and allopregnanolone: a quantitative trait locus study of common genetic influence. Genes Brain Behav. 2006 Oct;5(7):506-17.
Medline Link

Etactprov4

QTL Code	Etactprov4	PARC Alias		MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	5	Peak	124.2 Mb	Range	
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score		p value		Sex Specific	
Strains Tested		Increaser Allele		Dominance	
Comments					
Contact Person	T. Phillips	Last Updated	2007-04-09 14:17:51		

References

Palmer AA, Lessov-Schlaggar CN, Ponder CA, McKinnon CS, Phillips TJ. Sensitivity to the locomotor-stimulant effects of ethanol and allopregnanolone: a quantitative trait locus study of common genetic influence. Genes Brain Behav. 2006 Oct;5(7):506-17.
Medline Link

Etactprov5

QTL Code	Etactprov5	PARC Alias		MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	6	Peak	36.5 Mb	Range	
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score		p value		Sex Specific	Males only
Strains Tested		Increaser Allele		Dominance	
Comments					
Contact Person	T. Phillips	Last Updated	2007-04-09 14:20:12		

References

Palmer AA, Lessov-Schlaggar CN, Ponder CA, McKinnon CS, Phillips TJ. Sensitivity to the locomotor-stimulant effects of ethanol and allopregnanolone: a quantitative trait locus study of common genetic influence. Genes Brain Behav. 2006 Oct;5(7):506-17.
Medline Link

Etactprov6

QTL Code	Etactprov6	PARC Alias		MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	7	Peak	91.1 Mb	Range	
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score		p value		Sex Specific	
Strains Tested		Increaser Allele		Dominance	
Comments	Sex specific: females only				
Contact Person	T. Phillips	Last Updated	2007-04-09 14:49:17		

References

Palmer AA, Lessov-Schlaggar CN, Ponder CA, McKinnon CS, Phillips TJ. Sensitivity to the locomotor-stimulant effects of ethanol and allopregnanolone: a quantitative trait locus study of common genetic influence. Genes Brain Behav. 2006 Oct;5(7):506-17.
Medline Link

Etactprov7

QTL Code	Etactprov7	PARC Alias		MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	10	Peak	93.3 Mb	Range	
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score		p value		Sex Specific	
Strains Tested		Increaser Allele		Dominance	
Comments	Sex specific: females only				
Contact Person	T. Phillips	Last Updated	2007-04-09 14:58:11		

References

Palmer AA, Lessov-Schlaggar CN, Ponder CA, McKinnon CS, Phillips TJ. Sensitivity to the locomotor-stimulant effects of ethanol and allopregnanolone: a quantitative trait locus study of common genetic influence. Genes Brain Behav. 2006 Oct;5(7):506-17.
Medline Link

Etactprov8

QTL Code	Etactprov8	PARC Alias		MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	13	Peak	85.5 Mb	Range	
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score		p value		Sex Specific	
Strains Tested		Increaser Allele		Dominance	
Comments	Sex specific: females only				
Contact Person	T. Phillips	Last Updated	2007-04-09 15:07:43		

References

Palmer AA, Lessov-Schlaggar CN, Ponder CA, McKinnon CS, Phillips TJ. Sensitivity to the locomotor-stimulant effects of ethanol and allopregnanolone: a quantitative trait locus study of common genetic influence. Genes Brain Behav. 2006 Oct;5(7):506-17.
Medline Link

Etactprov9

QTL Code	Etactprov9	PARC Alias		MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	16	Peak	6.1 Mb	Range	
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score		p value		Sex Specific	
Strains Tested		Increaser Allele		Dominance	
Comments	Sex specific: males only				
Contact Person	T. Phillips	Last Updated	2007-04-09 15:11:00		

References

Palmer AA, Lessov-Schlaggar CN, Ponder CA, McKinnon CS, Phillips TJ. Sensitivity to the locomotor-stimulant effects of ethanol and allopregnanolone: a quantitative trait locus study of common genetic influence. Genes Brain Behav. 2006 Oct;5(7):506-17.
Medline Link

Etactprov10

QTL Code	Etactprov10	PARC Alias		MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Stimulated Activity		
Assay					
Chromosome	18	Peak	25 Mb	Range	
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score		p value		Sex Specific	
Strains Tested		Increaser Allele		Dominance	
Comments	Sex specific: females only				
Contact Person	T. Phillips	Last Updated	2007-04-09 15:13:01		

References

Palmer AA, Lessov-Schlaggar CN, Ponder CA, McKinnon CS, Phillips TJ. Sensitivity to the locomotor-stimulant effects of ethanol and allopregnanolone: a quantitative trait locus study of common genetic influence. Genes Brain Behav. 2006 Oct;5(7):506-17.
Medline Link

Etcpp1

QTL Code	Etcpp1		
Chromosome	7	Class	Alcohol
Peak	51 cM	Phenotype	Alcohol Conditioned Place Preference
Range		Assay	
p Value	0.0004	Strains Tested	BXD RI, B6 D2 F2
LOD Score	2.7	Status	Suggestive

References

Cunningham CL. Localization of genes influencing ethanol-induced conditioned place preference and locomotor activity in BXD recombinant inbred mice. Psychopharmacology (Berl). 1995 Jul;120(1):28-41.
Medline Link

Etcpp2

QTL Code	Etcpp2	PARC Alias		MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Conditioned Place Prefer.		
Assay					
Chromosome	8	Peak	43	Range	
Max Range (Mb)		Min Range (Mb)		Status	Provisional
LOD score	2.0	p value	0.002	Sex Specific	
Strains Tested	BXD RI, B6 D2 F2	Increaser Allele		Dominance	
Comments					
Contact Person	C. Cunningham	Last Updated	2007-01-17 00:00:00		

References

Cunningham CL. Localization of genes influencing ethanol-induced conditioned place preference and locomotor activity in BXD recombinant inbred mice. Psychopharmacology (Berl). 1995 Jul;120(1):28-41.
Medline Link

Etcta1

QTL Code	Etcta1		
Chromosome	1	Class	Alcohol
Peak	73 cM	Phenotype	Alcohol Conditioned Taste Aversion
Range		Assay	
p Value	6e-09	Strains Tested	BXD RI, B6 D2 F2, selected lines
LOD Score	7.0	Status	Significant

References

Risinger FO, Cunningham CL. Ethanol-induced conditioned taste aversion in BXD recombinant inbred mice. Alcohol Clin Exp Res. 1998 Sep;22(6):1234-44.
Medline Link

Etcta1/Etohcta1

QTL Code	Etcta1/Etohcta1	PARC Alias	Etcta1	MGI Alias	Etohcta1
Drug	Alcohol	Phenotype	Alcohol Conditioned Taste Aversion		
Assay					
Chromosome	1	Peak	73	Range	
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score	7.0	p value	6e-09	Sex Specific	
Strains Tested	BXD RI, B6 D2 F2, selected lines	Increaser Allele		Dominance	
Comments					
Contact Person	C. Cunningham	Last Updated	2007-04-10 12:54:22		

References

Risinger FO, Cunningham CL. Ethanol-induced conditioned taste aversion in BXD recombinant inbred mice. Alcohol Clin Exp Res. 1998 Sep;22(6):1234-44.
Medline Link

Etcta2

QTL Code	Etcta2		
Chromosome	4	Class	Alcohol
Peak	82 cM	Phenotype	Alcohol Conditioned Taste Aversion
Range		Assay	
p Value	2e-09	Strains Tested	BXD RI, B6 D2 F2, selected lines
LOD Score	7.5	Status	Significant

References

Risinger FO, Cunningham CL. Ethanol-induced conditioned taste aversion in BXD recombinant inbred mice. Alcohol Clin Exp Res. 1998 Sep;22(6):1234-44.
Medline Link

Etcta2/Etohcta2

QTL Code	Etcta2/Etohcta2	PARC Alias	Etcta2	MGI Alias	Etohcta2
Drug	Alcohol	Phenotype	Alcohol Conditioned Taste Aversion		
Assay					
Chromosome	4	Peak	82	Range	
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score	7.5	p value	2e-09	Sex Specific	
Strains Tested	BXD RI, B6 D2 F2, selected lines	Increaser Allele		Dominance	
Comments					
Contact Person	C. Cunningham	Last Updated	2007-04-10 12:55:38		

References

Risinger FO, Cunningham CL. Ethanol-induced conditioned taste aversion in BXD recombinant inbred mice. Alcohol Clin Exp Res. 1998 Sep;22(6):1234-44.
Medline Link

Etcta3

QTL Code	Etcta3		
Chromosome	6	Class	Alcohol
Peak	57 cM	Phenotype	Alcohol Conditioned Taste Aversion
Range		Assay	
p Value	0.0007	Strains Tested	BXD RI, B6 D2 F2, selected lines
LOD Score	2.2	Status	Suggestive

References

Risinger FO, Cunningham CL. Ethanol-induced conditioned taste aversion in BXD recombinant inbred mice. Alcohol Clin Exp Res. 1998 Sep;22(6):1234-44.
Medline Link

Etcta4

QTL Code	Etcta4		
Chromosome	7	Class	Alcohol
Peak	36 cM	Phenotype	Alcohol Conditioned Taste Aversion
Range		Assay	
p Value	0.0003	Strains Tested	BXD RI, B6 D2 F2, selected lines
LOD Score	2.6	Status	Suggestive

References

Risinger FO, Cunningham CL. Ethanol-induced conditioned taste aversion in BXD recombinant inbred mice. Alcohol Clin Exp Res. 1998 Sep;22(6):1234-44.
Medline Link

Ethyp2

QTL Code	Ethyp2		
Chromosome	5	Class	Alcohol
Peak	59 cM	Phenotype	Hypothermic Sensitivity
Range		Assay	Average difference from baseline of rectal body temperature measured at 30 and 60 minutes after 3 g/kg ethanol on day 1 of testing
p Value	0.002	Strains Tested	BXD RI, B6D2 F2
LOD Score	2.1	Status	Suggestive

References

Crabbe JC, Phillips TJ, Gallaher EJ, Crawshaw LI, Mitchell SR. Common genetic determinants of the ataxic and hypothermic effects of ethanol in BXD/Ty recombinant inbred mice: genetic correlations and quantitative trait loci. J Pharmacol Exp Ther. 1996 M
Medline Link

Crabbe JC, Belknap JK, Mitchell SR, Crawshaw LI. Quantitative trait loci mapping of genes that influence the sensitivity and tolerance to ethanol-induced hypothermia in BXD recombinant inbred mice. J Pharmacol Exp Ther. 1994 Apr;269(1):184-92.
Medline Link

Ethypprov1

QTL Code	Ethypprov1	PARC Alias	Ethyp2	MGI Alias	
Drug	Alcohol	Phenotype	Hypothermic Sensitivity		
Assay	Average difference from baseline of rectal body temperature measured at 30 and 60 minutes after 3 g/kg ethanol on day 1 of testing				
Chromosome	5	Peak	59	Range	
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score	2.1	p value	0.002	Sex Specific	
Strains Tested	BXD RI, B6D2 F2	Increaser Allele		Dominance	
Comments					
Contact Person	J Crabbe	Last Updated	2007-04-10 13:10:23		

References

Crabbe JC, Phillips TJ, Gallaher EJ, Crawshaw LI, Mitchell SR. Common genetic determinants of the ataxic and hypothermic effects of ethanol in BXD/Ty recombinant inbred mice: genetic correlations and quantitative trait loci. J Pharmacol Exp Ther. 1996 M
Medline Link

Crabbe JC, Belknap JK, Mitchell SR, Crawshaw LI. Quantitative trait loci mapping of genes that influence the sensitivity and tolerance to ethanol-induced hypothermia in BXD recombinant inbred mice. J Pharmacol Exp Ther. 1994 Apr;269(1):184-92.
Medline Link

Ethypt2

QTL Code	Ethypt2		
Chromosome	7	Class	Alcohol
Peak	44 cM	Phenotype	Hypothermic Tolerance
Range		Assay	Difference in hypothermic response between day 3 and day 1 after 3 g/kg ethanol each day
p Value	0.01	Strains Tested	BXD RI, B6D2 F2
LOD Score	1.4	Status	Provisional

References

Crabbe JC, Phillips TJ, Gallaher EJ, Crawshaw LI, Mitchell SR. Common genetic determinants of the ataxic and hypothermic effects of ethanol in BXD/Ty recombinant inbred mice: genetic correlations and quantitative trait loci. J Pharmacol Exp Ther. 1996 M
Medline Link

Crabbe JC, Belknap JK, Mitchell SR, Crawshaw LI. Quantitative trait loci mapping of genes that influence the sensitivity and tolerance to ethanol-induced hypothermia in BXD recombinant inbred mice. J Pharmacol Exp Ther. 1994 Apr;269(1):184-92.
Medline Link

Etohcppprov1

QTL Code	Etohcppprov1	PARC Alias	Etcpp1	MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Conditioned Place Preference		
Assay					
Chromosome	7	Peak	51	Range	
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score	2.7	p value	0.0004	Sex Specific	
Strains Tested	BXD RI, B6 D2 F2	Increaser Allele		Dominance	
Comments					
Contact Person	C. Cunningham	Last Updated	2007-04-10 13:04:39		

References

Cunningham CL. Localization of genes influencing ethanol-induced conditioned place preference and locomotor activity in BXD recombinant inbred mice. Psychopharmacology (Berl). 1995 Jul;120(1):28-41.
Medline Link

Etohcprov1

QTL Code	Etohcprov1	PARC Alias	Etp4	MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Preference Drinking		
Assay	Consumption of 10% ethanol with two-bottle choice				
Chromosome	4	Peak	59	Range	
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score	2.4	p value	0.0009	Sex Specific	
Strains Tested	BXDRI, B6D2 F2, STSL	Increaser Allele		Dominance	
Comments					
Contact Person	T. Phillips	Last Updated	2007-05-11 11:02:33		

References

Belknap JK, Atkins AL. The replicability of QTLs for murine alcohol preference drinking behavior across eight independent studies. Mamm Genome. 2001 Dec;12(12):893-9.
Medline Link

Phillips TJ, Belknap JK, Buck KJ, Cunningham CL. Genes on mouse chromosomes 2 and 9 determine variation in ethanol consumption. Mamm Genome. 1998 Dec;9(12):936-41.
Medline Link

Belknap JK, Richards SP, O'Toole LA, Helms ML, Phillips TJ. Short-term selective breeding as a tool for QTL mapping: ethanol preference drinking in mice. Behav Genet. 1997 Jan;27(1):55-66.
Medline Link

Phillips TJ, Crabbe JC, Metten P, Belknap JK. Localization of genes affecting alcohol drinking in mice. Alcohol Clin Exp Res. 1994 Aug;18(4):931-41.
Medline Link

Etohcprov2

QTL Code	Etohcprov2	PARC Alias	Etp6	MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Preference Drinking		
Assay	Consumption of 10% ethanol with two-bottle choice				
Chromosome	15	Peak	43	Range	
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score	2.6	p value	0.0005	Sex Specific	
Strains Tested	BXDRI, B6D2 F2, STSL	Increaser Allele		Dominance	
Comments					
Contact Person	T. Phillips	Last Updated	2007-04-05 14:13:29		

References

Belknap JK, Atkins AL. The replicability of QTLs for murine alcohol preference drinking behavior across eight independent studies. Mamm Genome. 2001 Dec;12(12):893-9.
Medline Link

Phillips TJ, Belknap JK, Buck KJ, Cunningham CL. Genes on mouse chromosomes 2 and 9 determine variation in ethanol consumption. Mamm Genome. 1998 Dec;9(12):936-41.
Medline Link

Belknap JK, Richards SP, O'Toole LA, Helms ML, Phillips TJ. Short-term selective breeding as a tool for QTL mapping: ethanol preference drinking in mice. Behav Genet. 1997 Jan;27(1):55-66.
Medline Link

Phillips TJ, Crabbe JC, Metten P, Belknap JK. Localization of genes affecting alcohol drinking in mice. Alcohol Clin Exp Res. 1994 Aug;18(4):931-41.
Medline Link

Etohctaprov1

QTL Code	Etohctaprov1	PARC Alias	Etcta3	MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Conditioned Taste Aversion		
Assay					
Chromosome	6	Peak	57	Range	
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score	2.2	p value	0.0007	Sex Specific	
Strains Tested	BXD RI, B6 D2 F2, selected lines	Increaser Allele		Dominance	
Comments					
Contact Person	C. Cunningham	Last Updated	2007-04-10 12:56:57		

References

Risinger FO, Cunningham CL. Ethanol-induced conditioned taste aversion in BXD recombinant inbred mice. Alcohol Clin Exp Res. 1998 Sep;22(6):1234-44.
Medline Link

Etohctaprov2

QTL Code	Etohctaprov2	PARC Alias	Etcta4	MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Conditioned Taste Aversion		
Assay					
Chromosome	7	Peak	36	Range	
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score	2.6	p value	0.0003	Sex Specific	
Strains Tested	BXD RI, B6 D2 F2, selected lines	Increaser Allele		Dominance	
Comments					
Contact Person	C. Cunningham	Last Updated	2007-04-10 12:57:17		

References

Risinger FO, Cunningham CL. Ethanol-induced conditioned taste aversion in BXD recombinant inbred mice. Alcohol Clin Exp Res. 1998 Sep;22(6):1234-44.
Medline Link

Etp1

QTL Code	Etp1		
Chromosome	2	Class	Alcohol
Peak	28 cM	Phenotype	Alcohol Preference Drinking
Range		Assay	Consumption of 10% ethanol with two-bottle choice
p Value	3e-05	Strains Tested	BXDRI, B6D2 F2, STSL
LOD Score	3.8	Status	Significant

References

Belknap JK, Atkins AL. The replicability of QTLs for murine alcohol preference drinking behavior across eight independent studies. Mamm Genome. 2001 Dec;12(12):893-9.
Medline Link

Phillips TJ, Belknap JK, Buck KJ, Cunningham CL. Genes on mouse chromosomes 2 and 9 determine variation in ethanol consumption. Mamm Genome. 1998 Dec;9(12):936-41.
Medline Link

Belknap JK, Richards SP, O'Toole LA, Helms ML, Phillips TJ. Short-term selective breeding as a tool for QTL mapping: ethanol preference drinking in mice. Behav Genet. 1997 Jan;27(1):55-66.
Medline Link

Phillips TJ, Crabbe JC, Metten P, Belknap JK. Localization of genes affecting alcohol drinking in mice. Alcohol Clin Exp Res. 1994 Aug;18(4):931-41.
Medline Link

Etp1/Etohc1

QTL Code	Etp1/Etohc1	PARC Alias	Etp1	MGI Alias	Etohc1
Drug	Alcohol	Phenotype	Alcohol Preference Drinking		
Assay	Consumption of 10% ethanol with two-bottle choice				
Chromosome	2	Peak	28	Range	
Max Range (Mb)	20.2 - 153.3	Min Range (Mb)	37.5 - 130.8	Status	Significant
LOD score	3.8	p value	3e-05	Sex Specific	
Strains Tested	BXDRI, B6D2 F2, STSL	Increaser Allele	B6	Dominance	Additive
Comments	Mb intervals based on congenics studies				
Contact Person	T. Phillips	Last Updated	2007-04-05 12:28:06		

References

Belknap JK, Atkins AL. The replicability of QTLs for murine alcohol preference drinking behavior across eight independent studies. Mamm Genome. 2001 Dec;12(12):893-9.
Medline Link

Phillips TJ, Belknap JK, Buck KJ, Cunningham CL. Genes on mouse chromosomes 2 and 9 determine variation in ethanol consumption. Mamm Genome. 1998 Dec;9(12):936-41.
Medline Link

Belknap JK, Richards SP, O'Toole LA, Helms ML, Phillips TJ. Short-term selective breeding as a tool for QTL mapping: ethanol preference drinking in mice. Behav Genet. 1997 Jan;27(1):55-66.
Medline Link

Phillips TJ, Crabbe JC, Metten P, Belknap JK. Localization of genes affecting alcohol drinking in mice. Alcohol Clin Exp Res. 1994 Aug;18(4):931-41.
Medline Link

Phillips TJ; unpublished data

Etp2

QTL Code	Etp2		
Chromosome	2	Class	Alcohol
Peak	49 cM	Phenotype	Alcohol Preference Drinking
Range		Assay	Consumption of 10% ethanol with two-bottle choice
p Value	0.0003	Strains Tested	BXDRI, B6D2 F2, STSL
LOD Score	2.9	Status	Significant

References

Belknap JK, Atkins AL. The replicability of QTLs for murine alcohol preference drinking behavior across eight independent studies. Mamm Genome. 2001 Dec;12(12):893-9.
Medline Link

Phillips TJ, Belknap JK, Buck KJ, Cunningham CL. Genes on mouse chromosomes 2 and 9 determine variation in ethanol consumption. Mamm Genome. 1998 Dec;9(12):936-41.
Medline Link

Belknap JK, Richards SP, O'Toole LA, Helms ML, Phillips TJ. Short-term selective breeding as a tool for QTL mapping: ethanol preference drinking in mice. Behav Genet. 1997 Jan;27(1):55-66.
Medline Link

Phillips TJ, Crabbe JC, Metten P, Belknap JK. Localization of genes affecting alcohol drinking in mice. Alcohol Clin Exp Res. 1994 Aug;18(4):931-41.
Medline Link

Etp2/Etohc2

QTL Code	Etp2/Etohc2	PARC Alias	Etp2	MGI Alias	Etohc2
Drug	Alcohol	Phenotype	Alcohol Preference Drinking		
Assay	Consumption of 10% ethanol with two-bottle choice				
Chromosome	2	Peak	49	Range	
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score	2.9	p value	0.0003	Sex Specific	
Strains Tested	BXDRI, B6D2 F2, STSL	Increaser Allele		Dominance	B6 recessive
Comments					
Contact Person	T. Phillips	Last Updated	2007-04-05 13:33:09		

References

Belknap JK, Atkins AL. The replicability of QTLs for murine alcohol preference drinking behavior across eight independent studies. Mamm Genome. 2001 Dec;12(12):893-9.
Medline Link

Phillips TJ, Belknap JK, Buck KJ, Cunningham CL. Genes on mouse chromosomes 2 and 9 determine variation in ethanol consumption. Mamm Genome. 1998 Dec;9(12):936-41.
Medline Link

Belknap JK, Richards SP, O'Toole LA, Helms ML, Phillips TJ. Short-term selective breeding as a tool for QTL mapping: ethanol preference drinking in mice. Behav Genet. 1997 Jan;27(1):55-66.
Medline Link

Phillips TJ, Crabbe JC, Metten P, Belknap JK. Localization of genes affecting alcohol drinking in mice. Alcohol Clin Exp Res. 1994 Aug;18(4):931-41.
Medline Link

Phillips TJ; unpublished data

Etp3

QTL Code	Etp3	PARC Alias	Etp3	MGI Alias	
Drug	Alcohol	Phenotype	Alcohol Preference Drinking		
Assay	Consumption of 10% ethanol with two-bottle choice				
Chromosome	3	Peak	75	Range	
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score	3.0	p value	0.0002	Sex Specific	
Strains Tested	BXDRI, B6D2 F2, STSL	Increaser Allele		Dominance	
Comments					
Contact Person	T. Phillips	Last Updated	2007-04-05 13:35:40		

References

Belknap JK, Atkins AL. The replicability of QTLs for murine alcohol preference drinking behavior across eight independent studies. Mamm Genome. 2001 Dec;12(12):893-9.
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Phillips TJ, Belknap JK, Buck KJ, Cunningham CL. Genes on mouse chromosomes 2 and 9 determine variation in ethanol consumption. Mamm Genome. 1998 Dec;9(12):936-41.
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Belknap JK, Richards SP, O'Toole LA, Helms ML, Phillips TJ. Short-term selective breeding as a tool for QTL mapping: ethanol preference drinking in mice. Behav Genet. 1997 Jan;27(1):55-66.
Medline Link

Phillips TJ, Crabbe JC, Metten P, Belknap JK. Localization of genes affecting alcohol drinking in mice. Alcohol Clin Exp Res. 1994 Aug;18(4):931-41.
Medline Link

Etp4

QTL Code	Etp4		
Chromosome	4	Class	Alcohol
Peak	59 cM	Phenotype	Alcohol Preference Drinking
Range		Assay	Consumption of 10% ethanol with two-bottle choice
p Value	0.0009	Strains Tested	BXDRI, B6D2 F2, STSL
LOD Score	2.4	Status	Suggestive

References

Belknap JK, Atkins AL. The replicability of QTLs for murine alcohol preference drinking behavior across eight independent studies. Mamm Genome. 2001 Dec;12(12):893-9.
Medline Link

Phillips TJ, Belknap JK, Buck KJ, Cunningham CL. Genes on mouse chromosomes 2 and 9 determine variation in ethanol consumption. Mamm Genome. 1998 Dec;9(12):936-41.
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Belknap JK, Richards SP, O'Toole LA, Helms ML, Phillips TJ. Short-term selective breeding as a tool for QTL mapping: ethanol preference drinking in mice. Behav Genet. 1997 Jan;27(1):55-66.
Medline Link

Phillips TJ, Crabbe JC, Metten P, Belknap JK. Localization of genes affecting alcohol drinking in mice. Alcohol Clin Exp Res. 1994 Aug;18(4):931-41.
Medline Link

Etp5

QTL Code	Etp5		
Chromosome	9	Class	Alcohol
Peak	29 cM	Phenotype	Alcohol Preference Drinking
Range		Assay	Consumption of 10% ethanol with two-bottle choice
p Value	3e-10	Strains Tested	BXDRI, B6D2 F2, STSL
LOD Score	8.0	Status	Significant

References

Belknap JK, Atkins AL. The replicability of QTLs for murine alcohol preference drinking behavior across eight independent studies. Mamm Genome. 2001 Dec;12(12):893-9.
Medline Link

Phillips TJ, Belknap JK, Buck KJ, Cunningham CL. Genes on mouse chromosomes 2 and 9 determine variation in ethanol consumption. Mamm Genome. 1998 Dec;9(12):936-41.
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Belknap JK, Richards SP, O'Toole LA, Helms ML, Phillips TJ. Short-term selective breeding as a tool for QTL mapping: ethanol preference drinking in mice. Behav Genet. 1997 Jan;27(1):55-66.
Medline Link

Phillips TJ, Crabbe JC, Metten P, Belknap JK. Localization of genes affecting alcohol drinking in mice. Alcohol Clin Exp Res. 1994 Aug;18(4):931-41.
Medline Link

Etp5/Etohc3

QTL Code	Etp5/Etohc3	PARC Alias	Etp5	MGI Alias	Etohc3
Drug	Alcohol	Phenotype	Alcohol Preference Drinking		
Assay	Consumption of 10% ethanol with two-bottle choice				
Chromosome	9	Peak	29	Range	
Max Range (Mb)	0 - 124	Min Range (Mb)	32.6 - 101.4	Status	Significant
LOD score	8.0	p value	3e-10	Sex Specific	
Strains Tested	BXDRI, B6D2 F2, STSL	Increaser Allele	B6	Dominance	Additive/Free
Comments	Mb intervals based on congenics studies				
Contact Person	T. Phillips	Last Updated	2007-04-05 14:10:45		

References

Belknap JK, Atkins AL. The replicability of QTLs for murine alcohol preference drinking behavior across eight independent studies. Mamm Genome. 2001 Dec;12(12):893-9.
Medline Link

Phillips TJ, Belknap JK, Buck KJ, Cunningham CL. Genes on mouse chromosomes 2 and 9 determine variation in ethanol consumption. Mamm Genome. 1998 Dec;9(12):936-41.
Medline Link

Belknap JK, Richards SP, O'Toole LA, Helms ML, Phillips TJ. Short-term selective breeding as a tool for QTL mapping: ethanol preference drinking in mice. Behav Genet. 1997 Jan;27(1):55-66.
Medline Link

Phillips TJ, Crabbe JC, Metten P, Belknap JK. Localization of genes affecting alcohol drinking in mice. Alcohol Clin Exp Res. 1994 Aug;18(4):931-41.
Medline Link

Kamens HM, Phillips TJ; unpublished data

Etp6

QTL Code	Etp6		
Chromosome	15	Class	Alcohol
Peak	43 cM	Phenotype	Alcohol Preference Drinking
Range		Assay	Consumption of 10% ethanol with two-bottle choice
p Value	0.0005	Strains Tested	BXDRI, B6D2 F2, STSL
LOD Score	2.6	Status	Suggestive

References

Belknap JK, Atkins AL. The replicability of QTLs for murine alcohol preference drinking behavior across eight independent studies. Mamm Genome. 2001 Dec;12(12):893-9.
Medline Link

Phillips TJ, Belknap JK, Buck KJ, Cunningham CL. Genes on mouse chromosomes 2 and 9 determine variation in ethanol consumption. Mamm Genome. 1998 Dec;9(12):936-41.
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Belknap JK, Richards SP, O'Toole LA, Helms ML, Phillips TJ. Short-term selective breeding as a tool for QTL mapping: ethanol preference drinking in mice. Behav Genet. 1997 Jan;27(1):55-66.
Medline Link

Phillips TJ, Crabbe JC, Metten P, Belknap JK. Localization of genes affecting alcohol drinking in mice. Alcohol Clin Exp Res. 1994 Aug;18(4):931-41.
Medline Link

Lore1

QTL Code	Lore1	PARC Alias		MGI Alias	Lore1
Drug	Alcohol	Phenotype	Alcohol-induced Loss of Righting Reflex		
Assay					
Chromosome	1	Peak		Range	36.9-41
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score	5.4	p value		Sex Specific	
Strains Tested	ILS, ISS, ISCR	Increaser Allele		Dominance	
Comments					
Contact Person	B. Bennett	Last Updated	2007-04-10 12:35:59		

References

Markel PD, Bennett B, Beeson M, Gordon L, Johnson TE. Confirmation of quantitative trait loci for ethanol sensitivity in long-sleep and short-sleep mice. Genome Res. 1997 Feb;7(2):92-9.
Medline Link

Lore2

QTL Code	Lore2	PARC Alias		MGI Alias	Lore2
Drug	Alcohol	Phenotype	Alcohol-induced Loss of Righting Reflex		
Assay					
Chromosome	2	Peak		Range	75.6-81.7
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score	6.6	p value		Sex Specific	
Strains Tested	ILS, ISS, ISCR	Increaser Allele		Dominance	
Comments					
Contact Person	B. Bennett	Last Updated	2007-04-10 12:36:10		

References

Markel PD, Bennett B, Beeson M, Gordon L, Johnson TE. Confirmation of quantitative trait loci for ethanol sensitivity in long-sleep and short-sleep mice. Genome Res. 1997 Feb;7(2):92-9.
Medline Link

Lore3

QTL Code	Lore3	PARC Alias		MGI Alias	Lore3
Drug	Alcohol	Phenotype	Alcohol-induced Loss of Righting Reflex		
Assay					
Chromosome	8	Peak		Range	44-71
Max Range (Mb)		Min Range (Mb)		Status	Suggestive
LOD score	3.4	p value		Sex Specific	
Strains Tested	ILS, ISS, ISCR	Increaser Allele		Dominance	
Comments					
Contact Person	B. Bennett	Last Updated	2007-04-10 12:36:16		

References

Markel PD, Bennett B, Beeson M, Gordon L, Johnson TE. Confirmation of quantitative trait loci for ethanol sensitivity in long-sleep and short-sleep mice. Genome Res. 1997 Feb;7(2):92-9.
Medline Link

Lore4

QTL Code	Lore4	PARC Alias		MGI Alias	Lore4
Drug	Alcohol	Phenotype	Alcohol-induced Loss of Righting Reflex		
Assay					
Chromosome	11	Peak		Range	36-42
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score	6.5	p value		Sex Specific	
Strains Tested	ILS, ISS, ISCR	Increaser Allele		Dominance	
Comments					
Contact Person	B. Bennett	Last Updated	2007-04-10 12:36:24		

References

Markel PD, Bennett B, Beeson M, Gordon L, Johnson TE. Confirmation of quantitative trait loci for ethanol sensitivity in long-sleep and short-sleep mice. Genome Res. 1997 Feb;7(2):92-9.
Medline Link

Lore5

QTL Code	Lore5	PARC Alias		MGI Alias	Lore5
Drug	Alcohol	Phenotype	Alcohol-induced Loss of Righting Reflex		
Assay					
Chromosome	15	Peak		Range	18.8-61.7
Max Range (Mb)		Min Range (Mb)		Status	Significant
LOD score	4.0	p value		Sex Specific	
Strains Tested	ILS, ISS, ISCR	Increaser Allele		Dominance	
Comments					
Contact Person	B. Bennett	Last Updated	2007-04-10 12:36:30		

References

Markel PD, Bennett B, Beeson M, Gordon L, Johnson TE. Confirmation of quantitative trait loci for ethanol sensitivity in long-sleep and short-sleep mice. Genome Res. 1997 Feb;7(2):92-9.
Medline Link