

Alcohol QTL PDF set of three documents:

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

This document is 3 of 3, * AlcoholQTLsByPhenotype

This is a list that was developed primarily for internal use by PARC investigators. Presently it consists largely, but not solely, of QTLs discovered by PARC researchers using C57BL/6J x DBA/2J mouse cross mapping populations. It does not include QTLs for responses to other drugs. For more information about the naming of *QTL Code*, see the companion pdf, *AlcoholQTLsDescriptions*.

The list below is arranged by phenotype, broadly defined. We have updated the peak position and range, and statistical status to date (reference is to genome wide "significance" at $p < .01$ or "suggestive" at $p < .05$, corrected for multiple comparisons).

For more information on an individual QTL, see the companion pdf, *AlcoholQTLsDescriptions*, which details 114 QTLs by *QTL Code*, in alphabetical order.

For additional information, contact Mark Rutledge-Gorman (rutledgm@ohsu.edu).

Phenotypes:

Acute Alcohol Withdrawal
Chronic Alcohol Withdrawal
Alcohol Preference Drinking
Alcohol Stimulated Activity
Alcohol Metabolism
Loss of Righting Reflex
Alcohol Response Conditioning
Hypothermia
Alcohol Acceptance

Acute Alcohol Withdrawal

QTL Code	Chr	Peak Pos.	Range (cM)	Max Range (Mb)	Status
Alcw1	1	96 cM	66-ter	172.3 - 174.0, 174.0 - 176.5	Significant
Alcw4	2	38 cM	28-53		Suggestive
Alcwprov1	2	60 cM	ND		Suggestive
Alcw2	4	38 cM	38-38.7	80.3 - 82.1	Significant
Alcw3	11	20 cM	16-28	34.7 - 55.9	Significant

Chronic Alcohol Withdrawal

QTL Code	Chr	Peak Pos.	Range (cM)	Max Range (Mb)	Status
Alcdpprov2	1	20 cM	12-35		Suggestive
Calw1/Alcdp1	1	96 cM	89-106.3	172.3 - 191.3	Significant
Caws1/Alcw5	1		28-47		Significant
Alcdpprov3	4	37 cM	30-44		Suggestive
Caws2	4		33-51		Significant
Caws3/Alcw6	8		16-43		Significant
Caws4/Alcw3	11		15-36		Significant
Alcdpprov1	13	37 cM	16-59		Suggestive
Caws5/Alcw7	14		24-48		Significant
Calw2/Alcdp2	19	47 cM	36.5-ter	10.4 - 55.2	Significant

Alcohol Preference Drinking

QTL Code	Chr	Peak Pos.	Range (cM)	Max Range (Mb)	Status
Ap1q	1	76 cM	45-95		Significant
Alcp1	2	28 cM	19-35		Significant
Etp1/Etohc1	2	28 cM		20.2 - 153.3	Significant
Etp2/Etohc2	2	49 cM			Significant
Ap2q	2	40 cM	30-50		Suggestive
Etp3	3	75 cM			Significant
Ap6q	3	45 cM	38-60		Suggestive
Etohcprov1	4	59 cM			Suggestive
Ap3q	4	75 cM	65-ter		Significant
Ap5q	9	25 cM	10-35		Significant
Etp5/Etohc3	9	29 cM		0 - 124	Significant
Ap4q	10	28 cM	18-57		Suggestive
Etohcprov2	15	43 cM			Suggestive

Alcohol Acceptance

QTL Code	Chr	Peak Pos.	Range (cM)	Max Range (Mb)	Status
Aaq1/Etacc	15	30 cM	15-48		Significant

Alcohol Stimulated Activity

QTL Code	Chr	Peak Pos.	Range (cM)	Max Range (Mb)	Status
Actre1/Actre1q	1	90 cM			Significant
Etact3	1	62.6 Mb			Significant
Actre7	1	113 cM			Significant
Etact1	2	51 cM	41-61	20.2 - 153.3	Significant
Actre3/Actre3q	2	60 cM			Significant
Actre2	2	56 cM			Significant
Actre4	2	65 cM			Significant
Etactprov1	2		73 - 93 cM		Suggestive
Etactprov2	3	19 cM	9-29		Suggestive
Etactprov3	3	18.8 Mb			Suggestive
Actre5	3	56 cM			Significant
Actre8	4	8 cM			Significant
Etactprov4	5	124.2 Mb			Suggestive
Etactprov5	6	36.5 Mb			Suggestive
Actre9	6	17 cM			Significant
Actre10	7	34 cM			Significant
Actre11	7	61 cM			Significant
Etactprov6	7	91.1 Mb			Suggestive
Actre12	8	48 cM			Significant
Etact2	9	113.5 Mb	51-71 cM	0 - 124	Significant
Actre6	9	52 cM			Significant
Actre13	10	51 cM			Significant
Etactprov7	10	93.3 Mb			Suggestive
Actre14	11	37 cM			Significant
Etactprov8	13	85.5 Mb			Suggestive
Actre15	14	37 cM			Significant
Actre16	15	67 cM			Significant
Etactprov9	16	6.1 Mb			Suggestive
Etactprov10	18	25 Mb			Suggestive
Actre17	19	24 cM			Significant
Actre18	X	33 cM			Significant
Actre19	X	50 cM			Significant

Alcohol Metabolism

QTL Code	Chr	Peak Pos.	Range (cM)	Max Range (Mb)	Status
Et3metprov1	1	102 cM			Suggestive
Et2metprov1	3	49 cM			Suggestive
Et3becprov1	12	52 cM			Suggestive
Et3becprov2	15	39 cM			Suggestive
Et2met1/Etmr	17	6.27 cM			Significant
Et3met1/Etmr	17	6.27 cM			Significant
Et2becprov1	17	6.27 cM			Suggestive
Et3becprov3	17	6.27 cM			Suggestive

Loss of Righting Reflex

QTL Code	Chr	Peak Pos.	Range (cM)	Max Range (Mb)	Status
Lore1	1		36.9-41		Significant
Lore2	2		75.6-81.7		Significant
Lore3	8		44-71		Suggestive
Lore4	11		36-42		Significant
Lore5	15		18.8-61.7		Significant

Alcohol Response Conditioning

QTL Code	Chr	Peak Pos.	Range (cM)	Max Range (Mb)	Status
Etcta1/Etohcta1	1	73 cM			Significant
Etcta2/Etohcta2	4	82 cM			Significant
Etohctapro1	6	57 cM			Suggestive
Etohctapro2	7	36 cM			Suggestive
Etohcppprov1	7	51 cM			Suggestive
Etcpp2	8	43 cM			Provisional

Hypothermia

QTL Code	Chr	Peak Pos.	Range (cM)	Max Range (Mb)	Status
Ethypprov1	5	59 cM			Suggestive