

**Table S4.** Number of eQTL correlated with traits for which candidate genes identified.

Trait	number of eQTL correlated with trait	% of eQTL correlated with trait
time in centre trial2	52	0.10
minimum total movement	59	0.11
average velocity	83	0.16
maximum total movement	68	0.13
total movement trial1	53	0.10
average total movement	67	0.13
velocity trial1	68	0.13
average total movement	42	0.08
velocity trial2	54	0.10