

TABLE S2
Replication of local and distal eQTLs between crosses, tissues and sexes

A

eQTL count	adipose			brain			liver			muscle		
	brain	liver	muscle	adipose	liver	muscle	adipose	brain	muscle	adipose	brain	liver
cross I												
tissue 1 LOD> 2.7	4315	4315	4315	4806	4806	4806	4387	4387	4387	4007	4007	4007
tissue 1 LOD> 4.3	2691	2691	2691	3281	3281	3281	2788	2788	2788	2459	2459	2459
tissue 1 LOD> 6	1914	1914	1914	2663	2663	2663	2199	2199	2199	1938	1938	1938
tissue 1 LOD> 2.7 vs tissue 2 LOD> 2.7	1956	1790	1716	1956	1956	1983	1790	1956	1750	1716	1983	1750
tissue 1 LOD> 4.3 vs tissue 2 LOD> 2.7	1585	1437	1414	1682	1669	1705	1497	1641	1475	1418	1630	1436
tissue 1 LOD> 6 vs tissue 2 LOD> 2.7	1304	1201	1193	1536	1513	1524	1342	1443	1318	1231	1425	1255
tissue 1 LOD> 2.7	4079	4079	4079	4783	4783	4783	4828	4828	4828	4119	4119	4119
tissue 1 LOD> 4.3	2406	2406	2406	3168	3168	3168	3246	3246	3246	2517	2517	2517
tissue 1 LOD> 6	1817	1817	1817	2591	2591	2591	2608	2608	2608	2008	2008	2008
cross II												
tissue 1 LOD> 2.7 vs tissue 2 LOD> 2.7	1910	1928	1732	1910	2138	1921	1928	2138	1952	1732	1921	1952
tissue 1 LOD> 4.3 vs tissue 2 LOD> 2.7	1532	1569	1446	1618	1799	1632	1691	1831	1672	1421	1571	1586
tissue 1 LOD> 6 vs tissue 2 LOD> 2.7	1292	1349	1269	1468	1597	1463	1520	1648	1507	1273	1384	1402

B

eQTL preservation (percent)		adipose			brain			liver			muscle		
		brain	liver	muscle	adipose	liver	muscle	adipose	brain	muscle	adipose	brain	liver
LOD > 2.7	cross I	45.33	41.48	39.77	40.70	40.70	41.26	40.80	44.59	39.89	42.83	49.49	43.67
	cross II	46.83	47.27	42.46	39.93	44.70	40.16	39.93	44.28	40.43	42.05	46.64	47.39
LOD > 4.3	cross I	58.90	53.40	52.55	51.26	50.87	51.97	53.69	58.86	52.91	57.67	66.29	58.40
	cross II	63.67	65.21	60.10	51.07	56.79	51.52	52.09	56.41	51.51	56.46	62.42	63.01
LOD > 6	cross I	68.13	62.75	62.33	57.68	56.82	57.23	61.03	65.62	59.94	63.52	73.53	64.76
	cross II	71.11	74.24	69.84	56.66	61.64	56.46	58.28	63.19	57.78	63.40	68.92	69.82

c

eQTL count	adipose			brain			liver			muscle		
	brain	liver	muscle	adipose	liver	muscle	adipose	brain	muscle	adipose	brain	liver
tissue 1 LOD > 2.7	185476	185476	185476	197153	197153	197153	218348	218348	218348	199599	199599	199599
tissue 1 LOD > 4.3	36552	36552	36552	32823	32823	32823	41648	41648	41648	32118	32118	32118
tissue 1 LOD > 6	5668	5668	5668	4554	4554	4554	7304	7304	7304	4537	4537	4537
cross I tissue 1 LOD > 2.7 vs tissue 2 LOD > 2.7	34818	36961	36024	34818	39465	38833	36961	39465	40501	36024	38833	40501
tissue 1 LOD > 4.3 vs tissue 2 LOD > 2.7	7336	7790	7726	6584	6931	7302	7671	7385	7835	7379	7239	7304
tissue 1 LOD > 6 vs tissue 2 LOD > 2.7	1294	1398	1347	1236	1173	1335	1565	1388	1522	1649	1290	1292
tissue 1 LOD > 2.7	209660	209660	209660	214555	214555	214555	229805	229805	229805	208024	208024	208024
tissue 1 LOD > 4.3	34340	34340	34340	32788	32788	32788	41807	41807	41807	28871	28871	28871
tissue 1 LOD > 6	4501	4501	4501	4260	4260	4260	6002	6002	6002	3117	3117	3117
cross I tissue 1 LOD > 2.7 vs tissue 2 LOD > 2.7	41215	45121	40173	41215	43227	39981	45121	43227	43174	40173	39981	43174
tissue 1 LOD > 4.3 vs tissue 2 LOD > 2.7	6928	7939	6843	6699	6970	6433	8841	8314	8239	5855	5970	6535
tissue 1 LOD > 6 vs tissue 2 LOD > 2.7	994	1162	1030	992	1108	1082	1367	1351	1355	773	837	856

D

eQTL preservation (percent)		adipose			brain			liver		muscle			
		brain	liver	muscle	adipose	liver	muscle	adipose	brain	muscle	adipose	brain	liver
LOD > 2.7	cross I	18.77	19.93	19.42	17.66	20.02	19.70	16.93	18.07	18.55	18.05	19.46	20.29
	cross II	19.66	21.52	19.16	19.21	20.15	18.63	19.63	18.81	18.79	19.31	19.22	20.75
LOD > 4.3	cross I	20.07	21.31	21.14	20.06	21.12	22.25	18.42	17.73	18.81	22.97	22.54	22.74
	cross II	20.17	23.12	19.93	20.43	21.26	19.62	21.15	19.89	19.71	20.28	20.68	22.64
LOD > 6	cross I	22.83	24.66	23.76	27.14	25.76	29.31	21.43	19.00	20.84	36.35	28.43	28.48
	cross II	22.08	25.82	22.88	23.29	26.01	25.40	22.78	22.51	22.58	24.80	26.85	27.46

The percent and count of eQTLs that replicated between crosses, tissues and sex at various LOD thresholds is shown. The eQTLs at LOD > 2.7, 4.3, and 6 of the mouse crosses were screened for detection at LOD > 2.7 in their respective comparison crosses. The percent indicates the degree of replication of eQTLs at LOD > 2.7, 4.3 and 6 in cross I that overlap in cross II at LOD > 2.7 over the total number of eQTLs at LOD > 4.3 detected in cross I and vice versa. For example, at LOD > 6, over 80% of the local eQTLs in cross I were preserved in cross II of the adipose tissue.