

Plate 1- Row A			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-umc1354	1	1	0
p-umc1566	2	1	16.5
p-umc1292	3	1	32.08
p-bnlg1124	4	1	41.67
p-bnlg1179	5	1	64.14
p-bnlg1014	6	1	82.8
p-umc1685	7	1	103
p-umc2225	8	1	124.7
p-bnlg1429	9	1	143.5
p-umc2226	10	1	165.8
p-bnlg109	11	1	188.58
p-umc1073	12	1	208.5

Plate 1- Row E			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-umc1737	1	1	1029.96
p-umc1744	2	1	1051.1
p-bnlg2123	3	1	1073.46
p-umc1331	4	1	1096.5
p-umc2100	5	1	1121.9
p-umc1622	6	2	2.6
p-umc1419	7	2	15.2
p-phi96100	8	2	28.1
p-umc2363	9	2	40.2
p-umc1542	10	2	57.6
p-bnlg1017	11	2	65.7
p-umc1265	12	2	77.7

Plate 1- Row B			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-umc1397	1	1	226.4
p-bnlg2204	2	1	254.86
p-bnlg2180	3	1	272.53
p-umc1598	4	1	290.7
p-bnlg2238	5	1	326.7
p-umc1472	6	1	345.85
p-umc1144	7	1	368.97
p-umc2228	8	1	391.8
p-umc2025	9	1	417
p-umc1461	10	1	438.8
p-umc1611	11	1	458.4
p-umc1323	12	1	483.83

Plate 1- Row F			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-umc1824	1	2	92.6
p-umc1756	2	2	141.6
p-umc1262	3	2	153.1
p-bnlg125	4	2	164.33
p-mm0231	5	2	179.4
p-umc1776	6	2	197.2
p-bnlg2248	7	2	207.74
p-umc1185	8	2	216.5
p-bnlg1064	9	2	227.1
p-phi109642	10	2	244
p-umc1026	11	2	256.05
p-umc1448	12	2	269.6

Plate 1- Row C			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-umc1812	1	1	508.2
p-umc2234	2	1	529
p-umc2235	3	1	550
p-umc1664	4	1	566.63
p-umc1035	5	1	587
p-umc1925	6	1	606.5
p-umc1374	7	1	627.1
p-umc1358	8	1	653.4
p-umc2064	9	1	678.49
p-bnlg1025	10	1	700.5
p-umc1245	11	1	721.9
p-umc1998	12	1	747.9

Plate 1- Row G			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-phi083	1	1	284.7
p-umc2249	2	1	296.3
p-umc1259	3	1	310.2
p-umc2079	4	1	320.7
p-umc2007	5	1	334.2
p-umc1922	6	1	345.2
p-umc2252	7	1	359.1
p-umc2253	8	1	376.1
p-umc2372	9	1	389.03
p-umc1108	10	1	401.5
p-umc2129	11	1	414.1
p-umc1890	12	1	422.7

Plate 1- Plate D			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-umc2080	1	1	769.4
p-mm0041	2	1	787.49
p-umc1914	3	1	809.9
p-umc1715	4	1	828.29
p-umc1298	5	1	850.27
p-umc1184	6	1	873.5
p-umc2189	7	1	892.2
p-umc1534	8	1	918.21
p-bnlg1347	9	1	933.09
p-phi265454	10	1	973
p-umc1500	11	1	985.11
p-umc1553	12	1	1007.6

Plate 1- Row H			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-mm0271	1	1	438.3
p-phi251315	2	1	453.8
p-bnlg2077	3	1	474.8
p-umc1745	4	1	485.58
p-umc1126	5	1	503.61
p-phi435417	6	1	520.5
p-umc2085	7	1	544.4
p-umc1992	8	1	556.21
p-mm0381	9	1	572.4
p-umc1516	10	1	584.3
p-umc1256	11	1	600.7
p-umc1525	12	1	612.29



Plate 2- Row A			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-umc1736	1	2	627.98
p-bnlq469	2	2	650.1
p-umc2184	3	2	692.4
p-phi101049	4	2	712.1
p-umc2214	5	2	728.36
p-umc2118	6	3	0
p-umc1780	7	3	11.2
p-umc2256	8	3	23.4
p-umc2049	9	3	38.7
p-umc2377	10	3	47.91
p-umc1458	11	3	67.2
p-umc1886	12	3	78.5

Plate 2- Row E			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-bnlq1496	1	3	760.9
p-umc1361	2	3	786.39
p-umc1641	3	3	806.9
p-umc1010	4	3	827.4
p-umc2048	5	3	858.62
p-umc1008	6	4	2.9
p-umc2279	7	4	22.9
p-umc1682	8	4	47.6
p-umc2409	9	4	70.05
p-umc2410	10	4	91.57
p-umc1294	11	4	108.43
p-bnlq1126	12	4	135.3

Plate 2- Row B			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-umc1814	1	3	86.84
p-bnlq1647	2	3	103.3
p-umc2258	3	3	127.8
p-umc2259	4	3	131.7
p-phi036	5	3	159
p-umc2158	6	3	176.6
p-umc1655	7	3	191.1
p-mmcc0132	8	3	208.6
p-umc2263	9	3	227.8
p-umc1223	10	3	234.4
p-umc1968	11	3	250.4
p-umc1683	12	3	266

Plate 2- Row F			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-umc2281	1	4	158.6
p-umc1902	2	4	181.4
p-umc2039	3	4	196.4
p-umc1117	4	4	218.5
p-bnlq490	5	4	237.8
p-umc2282	6	4	254.9
p-umc2282	7	4	271.4
p-umc1175	8	4	287.3
p-umc1702	9	4	305.2
p-mmcc0371	10	4	331.3
p-mmcc0371	11	4	349.8
p-dupssr16	12	4	371.71

Plate 2- Row C			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-umc1773	1	3	280.4
p-phi053	2	3	296.1
p-bnlq1601	3	3	306.1
p-umc1501	4	3	325.4
p-umc1307	5	3	339.61
p-umc2265	6	3	354
p-umc1973	7	3	371.4
p-umc1539	8	3	390.3
p-umc1876	9	3	414.69
p-umc2266	10	3	434.3
p-bnlq2241	11	3	454.31
p-umc1644	12	3	473.1

Plate 2- Row G			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-bnlq2291	1	4	392.2
p-umc2038	2	4	411.3
p-umc2038	3	4	428
p-umc1775	4	4	443.2
p-bnlq1444	5	4	462.5
p-bnlq2162	6	4	475.7
p-umc2041	7	4	483.93
p-umc1086	8	4	500.59
p-umc2285	9	4	514.9
p-umc2187	10	4	531.7
p-umc2286	11	4	553.7
p-umc2139	12	4	574.8

Plate 2- Row D			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-bnlq1160	1	3	491.4
p-bnlq197	2	3	511.5
p-umc2050	3	3	538.2
p-umc1148	4	3	552.14
p-umc1404	5	3	568.3
p-umc1825	6	3	579.5
p-umc2274	7	3	608.6
p-umc2081	8	3	627.1
p-umc2276	9	3	652.4
p-umc2174	10	3	683.6
p-umc2152	11	3	738.7
p-umc2277	12	3	747.5

Plate 2- Row H			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-umc1854	1	4	595.7
p-umc1328	2	4	618.1
p-umc1573	3	4	644.3
p-bnlq589	4	4	670.2
p-umc1109	5	4	687.8
p-umc2289	6	4	707.8
p-umc1738	7	4	720.48
p-umc2290	8	4	736.7
p-bnlq1890	9	4	750.2
p-umc1308	10	5	6.3
p-umc2291	11	5	23.3
p-umc1097	12	5	40.8



Plate 3 - Row A			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-umc1325	1	5	54.6
p-umc1679	2	5	71.5
p-umc1365	3	5	97.95
p-umc2036	4	5	124.7
p-bnlg565	5	5	150.9
p-bnlg1879	6	5	189.8
p-umc1686	7	5	210.3
p-mmc0351	8	5	230.4
p-umc2294	9	5	245.5
p-umc1830	10	5	266.3
p-umc1429	11	5	286.6
p-umc2298	12	5	307

Plate 3 - Row B			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-bnlg2323	1	5	328.5
p-umc1349	2	5	346.5
p-umc1221	3	5	368.4
p-mmc0081	4	5	389.9
p-umc1155	5	5	410.8
p-umc2304	6	5	428.3
p-bnlg1237	7	5	454.01
p-umc1019	8	5	469.6
p-umc1941	9	5	492.6
p-umc2216	10	5	518.37
p-phi085	11	5	528.7
p-umc1537	12	5	553.61

Plate 3 - Row C			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-umc1375	1	5	571.66
p-bnlg1118	2	5	590.4
p-bnlg118	3	5	609.4
p-umc1792	4	5	625.8
p-umc1225	5	5	641.4
p-bnlg389	6	5	661.56
p-umc1153	7	5	676.7
p-umc1002	8	6	9.1
p-umc2309	9	6	27.8
p-umc2068	10	6	47.8
p-umc1753	11	6	70.37
p-umc2313	12	6	91.9

Plate 3 - Row D			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-umc1186	1	6	114.25
p-y1SSR	2	6	120.5
p-umc1257	3	6	145.7
p-umc1887	4	6	166.8
p-umc1796	5	6	189.5
p-nc010	6	6	211.5
p-umc2006	7	6	228.9
p-umc2318	8	6	244.7
p-umc1250	9	6	254.5
p-umc1826	10	6	267.7
p-umc1314	11	6	284.3
p-umc1379	12	6	297.1

Plate 3 - Row E			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-bnlg1174	1	6	315.4
p-umc1020	2	6	325.9
p-umc2065	3	6	335.71
p-umc1805	4	6	346.22
p-bnlg1732	5	6	373.8
p-umc1912	6	6	388.7
p-umc2322	7	6	404.4
p-umc1520	8	6	414.48
p-umc2170	9	6	435.1
p-umc2170	10	6	452.7
p-umc1490	11	6	466.5
p-umc2323	12	6	483.5

Plate 3 - Row F			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-umc2165	1	6	502.9
p-bnlg1740	2	6	510.6
p-bnlg1740	3	6	531.8
p-umc2324	4	6	544.5
p-umc2177	5	7	0
p-umc1241	6	7	13.8
p-umc1642	7	7	27.2
p-umc1672	8	7	43.8
p-bnlg2132	9	7	53.3
p-umc1840	10	7	70.67
p-umc1159	11	7	92
p-umc1159	12	7	110.59

Plate 3 - Row G			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-umc2325	1	7	127.6
p-umc1401	2	7	153
p-umc1927	3	7	168.5
p-umc1879	4	7	183.4
p-umc1932	5	7	204.8
p-umc1339	6	7	214.12
p-umc1983	7	7	244.3
p-umc1393	8	7	258.4
p-bnlg657	9	7	276.79
p-mmc0411	10	7	292.7
p-umc1450	11	7	315.9
p-phi091	12	7	330.6

Plate 3 - Row H			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-umc1660	1	7	351.4
p-umc1837	2	7	368.9
p-bnlg2271	3	7	383.8
p-umc1936	4	7	405.5
p-umc1301	5	7	405.5
p-bnlg1666	6	7	430.5
p-umc1029	7	7	444.7
p-umc1543	8	7	457.44
p-umc1543	9	7	472.6
p-bnlg2259	10	7	489.2
p-umc1412	11	7	518.9
p-phi069	12	7	545.2



Plate 4 - Row A			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-umc1154	1	7	558.55
p-bnlgl469	2	7	572.56
p-umc2333	3	7	593.4
p-phi116	4	7	611.5
p-umc1786	5	8	10.58
p-umc2042	6	8	30.3
p-umc1414	7	8	48
p-umc1075	8	8	59.88
p-umc1483	9	8	83.1
p-bnlgl1194	10	8	105.4
p-umc1304	11	8	128.6
p-umc1974	12	8	153.3

Plate 4 - Row B			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-umc1913	1	8	160.8
p-umc1530	2	8	179.5
p-umc2146	3	8	198.4
p-umc2354	4	8	216.2
p-umc1984	5	8	234.8
p-umc1802	6	8	257.67
p-phi100175	7	8	274.9
p-umc2154	8	8	295.3
p-bnlgl2046	9	8	315.2
p-umc1343	10	8	337.2
p-umc1846	11	8	357.9
p-umc1340	12	8	377.7

Plate 4 - Row C			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-umc1824	1	8	397.86
p-bnlgl1152	2	8	414.1
p-umc1728	3	8	432.4
p-bnlgl1031	4	8	455.1
p-umc1607	5	8	466.5
p-bnlgl1823	6	8	483.4
p-bnlgl1828	7	8	506.8
p-umc1005	8	8	526.6
p-umc1673	9	8	546.9
p-umc1069	10	8	571.5
p-umc1663	11	8	608.1
p-bnlgl1131	12	8	628.2

Plate 3 - Row D			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-umc1957	1	9	0
p-umc1370	2	9	17.7
p-umc1867	3	9	24.3
p-bnlgl1288	4	9	43.23
p-bnlgl1583	5	9	62.3
p-phi033	6	9	80.3
p-umc1170	7	9	101.1
p-umc2336	8	9	125.7
p-bnlgl244	9	9	142.6
p-bnlgl1372	10	9	155.16
p-umc1698	11	9	170.4
p-phi022	12	9	191.7

Plate 4 - Row E			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-umc1586	1	9	199.7
p-umc2337	2	9	220.1
p-umc2340	3	9	238.4
p-umc1267	4	9	257.6
p-bnlgl209	5	9	273.2
p-umc1107	6	9	285.8
p-bnlgl1012	7	9	298
p-umc2121	8	9	315.7
p-umc1231	9	9	342
p-bnlgl1091	10	9	351.23
p-umc1494	11	9	373.66
p-umc2343	12	9	385.3

Plate 4 - Row F			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-umc2134	1	9	404.3
p-umc1794	2	9	420.18
p-umc2346	3	9	461.6
p-umc1366	4	9	489.9
p-umc1310	5	9	517.73
p-phi448880	6	9	536.8
p-bnlgl619	7	9	554.4
p-umc2347	8	9	578.6
p-umc1137	9	9	603.5
p-umc1982	10	9	633.2
p-umc1380	11	10	16.6
p-phi041	12	10	30.9

Plate 4 - Row G			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-umc1291	1	10	58.76
p-umc2053	2	10	76.2
p-umc1576	3	10	97.9
p-umc2034	4	10	120.1
p-umc1337	5	10	143.3
p-bnlgl1547	6	10	161.85
p-umc1962	7	10	180.7
p-umc1345	8	10	199.5
p-bnlgl1712	9	10	217.8
p-umc2348	10	10	244.6
p-MZETC34	11	10	268.1
p-umc1330	12	10	287.9

Plate 4 - Row H			
Gene Name	Plate location	Linkage group (chrom.)	Map location (IBMn)
p-umc1154	1	10	308.7
p-bnlgl1074	2	10	332.1
p-umc1506	3	10	344.8
p-umc1477	4	10	366.3
p-umc2122	5	10	392.5
p-bnlgl2190	6	10	412.3
p-umc1196	7	10	444.8
p-bnlgl1839	8	10	466.4
p-umc1877	9	10	488.63
p-umc2021	10	10	505.5
p-umc1038	11	10	525.11
p-umc1645	12	10	578.09

