

Section	Pedigree	Height Requirements
A	A X A	Up to 12.2 hands (50 in)
B	AXB or BXB	Up to 14.2 hands (58 in)
C	At least one C or D parent	Up to 13.2 hands (54 in)
D	At least one C or D parent	Over 13.2 hands (54 in)
H	At least one registered purebred Welsh parent	No height limit
P	At least one registered half Welsh parent	No height limit

Supplemental Table 1: Breed requirements for Welsh pony sections based on pedigree and height requirements.

Breed	Number of Individuals
Yakutian	9
Welsh Pony	44
Warmblood	18
Thoroughbred	25
Standardbred	40
Przewalski	13
Morgan	61
Maremmano	22
Lusitano	21
Icelandic	18
Hanoverian	8
French Trotter	21
Franchese Montagne	30
Belgian	22
Arabian	36
Quarter Horse	75
Total	463

Supplemental Table 2: Reference population used for the calculation of d_i .

Exon	EquCab2	EquCab3	HMGA2 Horse Exon Sequence	Forward Primer	Reverse Primer	BP
1	N/A	80374152 - 80374262	ATGAGCGCACGCGGTGAGGG CGCCGGGCAGCCGTCCA CAGCCCAGGGACAACCTGCC GCCCCGGCGCCTCAGAAGAG AGGACGCGGCCGACCCAGGA AGCAGCAGCAA	CTCGTCCTCCAGCCCTATC (Sanger Sequencing) CTTCAGCCCAGGGACAAG (Genotyping Assay)	CGTGCACAATAGCGAAAGTC (Sanger Sequencing) ACTGACTTGCTGCTGCTT (Genotyping Assay)	491
2	81392745 - 81392831	80376870 - 80376956	GAGCCAACCGGTGAGCCCTC TCCTAAGAGACCCAGGGGAA GACCCAAAGGCAGCAAAAAC AAGAGTCCCTCCAAAGCAGCT CAAAAG	GTTCCAACCCTTCTGTGCGA G	ACTGGGTTTTGCAGTAGTCA	623
3	81402791 - 81402841	80386916 - 80386966	AAAGCAGAAGCCACTGGAGA AAAACGGCCAAGAGGCAGAC CTAGGAAATGG	AAACGGGGCAGAGGAATC TA	GAGCGTCTCCTGGAAAGAAC	458
4	81503615 - 81503647	80487792 - 80487824	CCACAACAAGTCGTTCAGAAG AAGCCTGCTCAG	GACCATGTATAAACACCCT TTAACC	GGTTTTAATCACACAACCA CAG	383
5	81515174 - 81515221	80499351 - 80499398	GACAATGTTGCCTTGCCTGG GAAAGACCATCTAGGCAATCT TATGTGTCTACTACTTTTATA AATGCTGCTTGA	GCAGAACCTGCTGGAGTC AC	TGTGGGCAAGTGAATAATTG	398

Supplemental Table 3: PCR primers [for Sanger sequencing](#) and annotation for *HMGA2* exon sequencing. Based on poor annotation of the *HMGA2* gene in EquCab2 reference genome, we did a full reconstruction of the gene. Notably, Ensembl has this gene positioned for the horse at equine chromosome 6 (ECA6): 81,197,462-81,402,841 in contrast to NCBI position at ECA6: 81,389,151-81,518,054. Neither assembly included the ~1.4 kilobases annotated by Frishchnecht et al, including exon 1 and the 5' UTR (GenBank: LN8490000.1). Based on our annotation of exons 2-5, the NCBI position appears more accurate and corresponds with the most predominant peak identified in the haplotype analysis for baseline insulin (ECA6: 81,381,221-81,583,507). Base pair locations for EquCab2 and EquCab3 are also provided.

Exon	EquCab2	EquCab3	IRAK3 Horse Exon Sequence	Forward Primer	Reverse Primer	BP
1	N/A	80681675 - 80681889	AATTTCCGCGGTTGTGTAAGTCCCGCC GCGGGCGCGCAGCGGCCTGGCCTCGCC TCCCTCCTCCACCGGGCCCTGCTCTCCG GCGGCAGAGCTATGGCCTGGGCGGCAG CGGCGGGCAGCGGCGGGGCCCGCGGC CAGCTCTCGGCGCACACGCTCCTCTTCG ACCTGCCTCCCGTGCTGCTGGGCGAGCT CTGCGCCGTCTGGACAGCTGCGACGG CGCGCTCGGCTGGCGCCGCTCGGTGA GTGCGCCCGGGCGGGCGGGGGCTCCG CGCACGCTCCGTGCCCCCGCGCCGGG GGTCGCTCCACCGGCCCCAGGACTGGG GCCTCCGCGCACGCTCCGTGCGCCCCG CGCCGTGCTGGGGCCGCTCCGCCCCTT CCTGGACCGAGTCTCCGTG	AATTTCCGCGGTTGTG TAAC	CACGGAGACTCGGTC CAG	399
2	81711764 - 81711955	80696010 - 80696192	GCGGAGCGACTTTCAAGCAGCTGGCTGG ATGTTTCGTCACATTGAAAAGTATGTAGAC CAAGGGAAAAGTGGAACGAGAGAATTGC TTTGCTCTGGGCACAGAAAAACAAGAC CATCGGTGACCTTTTACAGATCCTCCAG GAGATGGGGCATCATCGAGCTATCCATT TAATTACAAACCATGGTAAACAC	GTTGTCACTGCCTCC GATC	AAGTTTGGCAAGAAG GAAGGA	580
3	81720696 - 81720760	80704941 - 80705005	GAGCAGCCTTGAATCCTTCAGAGCAGAG TCACCTGGGAGATGGATTTCCAAGCATG TTACCCAAG	TTCAATGGAAATGACA CTGAGC	TCCTGAATCCCCAACT AAACA	372
4	81721655 - 81721709	80705900 - 80705954	GAAACAACCAATGTCACAGTGGATAATGT TCTTATTCCTAAACATAATGAAAAAG	AGAGTTGGTATGGAA GCCTT	CACCCATCAGAACCAT GTGT	437
5	81722977 - 81723128	80707222 - 80707373	GAATATTGTTTAAACCTTCTATCAGCTTTC AAAACATCACAGAAGGAACCAAAAATTTT CACAAAGACTTCTAATTGGAGAAGGGG AGATTTTTGAGGTGTACAGAGTGGAGAT CCAAAACCGAACGTATGCCGTTAAATTAT TTAAACAG	GCTCTCCTGACTTTCC ACTG	TCAGTCATTTCTCCAG TCACC	451
6	81726877 - 81726941	80711122 - 80711186	GAGAAAAAATGCAATGTAAGCAACAATG GAAGAGCTTTTTATCTGAGCTTGAAGTTT TACTACT	AGCGGTGGTTCTGAT TGTTT	AGGAATATACCAAGG CAGATGT	418

Supplemental Table 4: PCR primers and annotation for *IRAK3* exon sequencing.

Exon	EquCab2	EquCab3	IRAK3 Horse Exon Sequence	Forward Primer	Reverse Primer	BP
7	81731400 - 81731514	80715645 - 80715759	GTTTCATCATCCAAACATTCTGGAGTTGGCTGC ATATTTTACAGAGAGTGACAAGTTCTGCCTGGTT TATCCGTATATGAGAAATGGGTCCCTTTTTGACA GACTGCAGTGTGTA	AATCTGTGTCAC GTGTCTGG	GTCCTCTGCTTTCTTG GGAA	418
8	81732314 - 81732432	80716559 - 80716677	GGTAACACAGCCCCGCTCTCTTGGCACATTCTGA ATCAGTATCTTAATAGGAGCGTGCAAGGCCATC CAGTATTTGCACAACATCGAGCCGTGCTCAGTT GTCTGTGGCAGCATCTCCAG	AGGTCGTCAGTA GTAGAGGA	AGAGTTCTTCACACGA GCAC	406
9	81745387 - 81745585	80729635 - 80729833	TGCAAACATACTTTTTGGATGATCAGTTTCAACCC AAACTAACTGATTTTGGCGTGGCGCACTTCCGA CCCCACCTTGAACACCAGCACTGCACCATCAGC GTGACCGGCTGCAACAGGAAACACCTGTGGTA CATGCCCGAGGAGTACGTCAGGCAGGGCAGAC TCACCGTCAAACCGACGTCTACAGCTTTGGGA TT	GCTCTAGTTCGT GGAAAATTGC	TTTATATTTTATTGCTT GACTGACTGC	384
10	81745841 - 81745903	80730089 - 80730151	GTAATCATGGAAGTTCTGACAGGTTGTAAAGTG GTGTTGGATGAGCCAAAGCACATCCAGCTG	TGCAGTCAGTCA AGCAATAAA	ATTTTCTGTGGTGCCT GGTT	661
11	81745992 - 81746156	80730240 - 80730404	AGGGATCTTCTTATGGAATTGATGGAAAAGAGA GGCCTTGATTCATGTCTCTCATATCTAGATAAGA AAGTGTGTCCCTGTCTCGGAATTTCTCTGCCA AGCTGTTCTTTGGCGGGCCAGTGTGCTGCAA CACGGGCCAAGTTGAGACCATCGATGGATGAA	TGCAGTCAGTCA AGCAATAAA	ATTTTCTGTGGTGCCT GGTT	661
12	81748556 - 81749029	80732804 - 80733277	GTCCTGACCGTTCTTGAGAGCACTCCGGCCAGCT TGTATTTTGCTGAAGACCCTCCCGCCTCACTGAAG TCCTTCAGGTGTCCCTTCTCCTCTGTTCTTGGACAA CGTACCAAGTATTCCAGTGGAAAATGATGAAAACC AGAATAACTCTTCCCTGCCTCCTGATAAAGCTTGG AGAAAAGAGAGAATGACTCAGAAAATTCCTTTGA ATGTAGCCAGTCTGAGGTGACGTTTCTGGGCTTTG AGAGAAAGACAGGGAGTCAGAGAAATGAGGATGC TTGCAACATACCCAGTTCTTCTTGTGAAAAGAGTT GGTCTCAAAGGATGCAGCTCCATCCCAGGACTC CAGCACCTGTGGTGTGACTATGGACCCTTCTGCA GAAGCTCTGGGCCAGTCTTACAGGAGCAGGCCAA TGGAGATTAGCTGGTCTTCTGAATTTTCTGGAAT GAATGTGAAGAGTACAAAAAGGAG	GCTCAGGGACCA TGTTTCTC	ATTTCTAAGCCACCCC GTTT	770

Supplemental Table 4 (cont): PCR primers and annotation for *IRAK3* exon sequencing.

Test	Height	Insulin	INS-OST	NEFA	Triglycerides
ANOVA F-statistic Additive	-3.78 SE=0.21 p=<2.2e-16 F=<2.2e-16	.18 SE=.031 p=7.8e-09 F=1.3e-10	.18 SE=.038 p=1.9e-06 F=1.2e-09	.043 SE=.014 p=2.1e-03 F=7.1e-04	.14 SE=.038 p=2.0e-04 F=9.2e-08
ANOVA F-statistic Recessive	-4.89 SE=.317 p=<2.2e-16 F=<2.2e-16	.28 SE=.043 p=4.9e-10 F=8.8e-12	.28 SE=.052 p=1.3e-07 F=9.3e-11	.074 SE=.020 p=1.7e-04 F=8.7e-05	.20 SE=.053 p=2.0e-04 F=9.3e-08
ANOVA F-statistic Dominant	-6.21 SE=.56 p=<2.2e-16 F=<2.2e-16	.213 SE=.071 p=2.8e-03 F=1.9e-05	.19 SE=.085 p=.024 F=6.3e-05	.029 SE=.031 p=.034 F=.042	.20 SE=.085 p=.018 F=5.1e-05
AIC Additive	1403.8	251.2	343.4	-229	373
AIC Recessive	1443	249.2	341.1	-230.3	371.7
AIC Dominant	1521.3	279.5	364.5	-216.9	390
AIC Co-Dominant	1584.9	267.2	352.3	-220.7	389.9

Supplemental Table 5: ANOVA results and Akaike information criterion (AIC) values for models of inheritance between the *HMG2* c.83G>A variant and height and the four EMS traits significantly correlated with genotype. ANOVA results and AIC values for models of inheritance between the *HMG2* c.83G>A variant and height and the four EMS traits significantly correlated with genotype. Deciding values are highlighted in red. For height, an additive model was the best fit model (lowest AIC). For the EMS traits, p-value for the f-statistic slightly favored the recessive model but the AIC could not differentiate between a recessive and additive model. For example, the AIC for the recessive insulin model was 249.2 and 251.2 for the additive model, which can be interpreted as the additive model being 0.36 [$\exp^{-(249.2-251.2)/2}$] times as likely as the recessive model, concluding that there is insufficient information to support picking either model. Abbreviations: INS-OST = insulin post oral sugar test, NEFA = non-esterified fatty acids.

Axiom MCEc2M SNP ID	EquCab2 BP Location	EquCab3 BP Location	Di	Height Assoc.	Insulin Assoc.
MNEc.2.6.80499826.PC	80499826	81667046			
MNEc.2.6.80501042.PC	80501042	81668273			
MNEc.2.6.80501273.PC	80501273	81668520		X	
MNEc.2.6.80502406.PC	80502406	81669653			
MNEc.2.6.80503522.PC	80503522	81670789			
MNEc.2.6.80503614.PC	80503614	81670881			
MNEc.2.6.80503671.PC	80503671	81670938			
MNEc.2.6.80504332.PC	80504332	81671599			
MNEc.2.6.80504637.PC	80504637	81671904			
MNEc.2.6.80504799.PC	80504799	81672066			
MNEc.2.6.80505411.PC	80505411	81672678			
MNEc.2.6.80509032.PC	80509032	81676297			
MNEc.2.6.80512076.PC	80512076	81679341			
MNEc.2.6.80512513.PC	80512513	81679778			
MNEc.2.6.80513598.PC	80513598	81680863			
MNEc.2.6.80515954.PC	80515954	81683219			
MNEc.2.6.80516105.PC	80516105	81683370			
MNEc.2.6.80516221.PC	80516221	81683486			
MNEc.2.6.80518479.PC	80518479	81685747			
MNEc.2.6.80518512.PC	80518512	81685780			
MNEc.2.6.80518693.PC	80518693	81685961			
MNEc.2.6.80520101.PC	80520101	81687369		X	
MNEc.2.6.80521407.PC	80521407	81688626			
MNEc.2.6.80522351.PC	80522351	81689570		X	
MNEc.2.6.80523773.PC	80523773	81690992			
MNEc.2.6.80527094.PC	80527094	81694313		X	
MNEc.2.6.80527223.PC	80527223	81694442			
MNEc.2.6.80527481.PC	80527481	81694700			
MNEc.2.6.80533180.PC	80533180	81700398			
MNEc.2.6.80533647.PC	80533647	81700865			
MNEc.2.6.80544097.PC	80544097	81711319			
MNEc.2.6.80545253.PC	80545253	81712475			
MNEc.2.6.80545309.PC	80545309	81712531			
MNEc.2.6.80548131.PC	80548131	81715353			
MNEc.2.6.80554792.PC	80554792	81722014			
MNEc.2.6.80555907.PC	80555907	81723129			
MNEc.2.6.80557468.PC	80557468	81724690			
MNEc.2.6.80564229.PC	80564229	81731412			
MNEc.2.6.80567345.PC	80567345	81734532			
MNEc.2.6.80567618.PC	80567618	81734805			
MNEc.2.6.80568218.PC	80568218	81735405			
MNEc.2.6.80569235.PC	80569235	81736422			
MNEc.2.6.80569293.PC	80569293	81736480			
MNEc.2.6.80569852.PC	80569852	81737039			
MNEc.2.6.80570298.PC	80570298	81737485		X	
MNEc.2.6.80572371.PC	80572371	81739554			
MNEc.2.6.80572584.PC	80572584	81739767			
MNEc.2.6.80574750.PC	80574750	81741935			
MNEc.2.6.80574793.PC	80574793	81741978			
MNEc.2.6.80575672.PC	80575672	81742857			
MNEc.2.6.80576028.PC	80576028	81743213			

Axiom MCEc2M SNP ID	EquCab2 BP Location	EquCab3 BP Location	Di	Height Assoc.	Insulin Assoc.
MNEc.2.6.80579951.BIEC2-1023886	80579951	81747136			
MNEc.2.6.80580074.PC	80580074	81747259			
MNEc.2.6.80580136.PC	80580136	81747321			
MNEc.2.6.80580526.PC	80580526	81747711			
MNEc.2.6.80580756.PC	80580756	81747941			
MNEc.2.6.80582308.PC	80582308	81749493			
MNEc.2.6.80582595.PC	80582595	81749780			
MNEc.2.6.80585781.PC	80585781	81752969			
MNEc.2.6.80586564.PC	80586564	81753752			
MNEc.2.6.80587550.PC	80587550	81754738			
MNEc.2.6.80592143.PC	80592143	81759332			
MNEc.2.6.80592392.PC	80592392	81759581			
MNEc.2.6.80597639.PC	80597639	81764830			
MNEc.2.6.80597710.PC	80597710	81764901			
MNEc.2.6.80598790.PC	80598790	81765981			
MNEc.2.6.80599081.PC	80599081	81766272			
MNEc.2.6.80599420.PC	80599420	81766612			
MNEc.2.6.80602873.PC	80602873	81770065			
MNEc.2.6.80605857.PC	80605857	81773049		X	
MNEc.2.6.80608356.PC	80608356	81775548			
MNEc.2.6.80609214.PC	80609214	81776406			
MNEc.2.6.80613296.PC	80613296	81780489			
MNEc.2.6.80613431.PC	80613431	81780624			
MNEc.2.6.80617709.PC	80617709	81784902			
MNEc.2.6.80619822.PC	80619822	81787015			
MNEc.2.6.80620304.PC	80620304	81787497			
MNEc.2.6.80620478.PC	80620478	81787671			
MNEc.2.6.80620792.BIEC2-1023912	80620792	81787985			
MNEc.2.6.80621253.PC	80621253	81788446			
MNEc.2.6.80621281.PC	80621281	81788474			
MNEc.2.6.80622121.PC	80622121	81789314			
MNEc.2.6.80622788.PC	80622788	81789981			
MNEc.2.6.80623531.PC	80623531	81790724			
MNEc.2.6.80625415.PC	80625415	81792608			
MNEc.2.6.80625991.PC	80625991	81793184			
MNEc.2.6.80627668.PC	80627668	81794861			
MNEc.2.6.80628078.PC	80628078	81795271			
MNEc.2.6.80634102.PC	80634102	81801300		X	
MNEc.2.6.80635142.PC	80635142	81802340			
MNEc.2.6.80636041.PC	80636041	81803239		X	
MNEc.2.6.80636779.PC	80636779	81803977			
MNEc.2.6.80639056.PC	80639056	81806255			
MNEc.2.6.80639161.PC	80639161	81806360			
MNEc.2.6.80639787.BIEC2-1023925	80639787	81806986		X	X
MNEc.2.6.80639984.PC	80639984	81807183			
MNEc.2.6.80640275.PC	80640275	81807474			
MNEc.2.6.80642478.PC	80642478	81809677			
MNEc.2.6.80648966.PC	80648966	81816165			
MNEc.2.6.80649778.PC	80649778	81816951			
MNEc.2.6.80651081.PC	80651081	81818254			
MNEc.2.6.80651346.PC	80651346	81818519			

Axiom MCEc2M SNP ID	EquCab2 BP Location	EquCab3 BP Location	Di	Height Assoc.	Insulin Assoc.
MNEc.2.6.80654729.PC	80654729	81821902			
MNEc.2.6.80655300.PC	80655300	81822473			
MNEc.2.6.80656692.PC	80656692	81823865		X	
MNEc.2.6.80657480.PC	80657480	81824653			
MNEc.2.6.80658576.PC	80658576	81825749		X	
MNEc.2.6.80659413.PC	80659413	81826586			
MNEc.2.6.80659646.PC	80659646	81826819			
MNEc.2.6.80659981.PC	80659981	81827154			
MNEc.2.6.80660228.PC	80660228	81827401			
MNEc.2.6.80663069.PC	80663069	81830242			
MNEc.2.6.80666273.PC	80666273	81833447			
MNEc.2.6.80666491.PC	80666491	81833665			
MNEc.2.6.80670901.PC	80670901	81838075			
MNEc.2.6.80672874.PC	80672874	81840048			
MNEc.2.6.80674503.PC	80674503	81841677			
MNEc.2.6.80678320.PC	80678320	81845492			
MNEc.2.6.80681512.PC	80681512	81848686			
MNEc.2.6.80684153.PC	80684153	81851327			
MNEc.2.6.80686536.PC	80686536	81853710			
MNEc.2.6.80686702.PC	80686702	81853876			
MNEc.2.6.80688324.PC	80688324	81855498		X	
MNEc.2.6.80692551.PC	80692551	81859725			
MNEc.2.6.80694638.PC	80694638	81861812			
MNEc.2.6.80694729.PC	80694729	81861903			
MNEc.2.6.80697067.PC	80697067	81864242			
MNEc.2.6.80697327.PC	80697327	81864502			
MNEc.2.6.80700969.PC	80700969	81868144			
MNEc.2.6.80701317.PC	80701317	81868492			
MNEc.2.6.80701518.PC	80701518	81868693		X	
MNEc.2.6.80702649.PC	80702649	81869824			
MNEc.2.6.80703890.PC	80703890	81871065			
MNEc.2.6.80708442.PC	80708442	81875617			
MNEc.2.6.80710843.PC	80710843	81878018			
MNEc.2.6.80714065.PC	80714065	81881240			
MNEc.2.6.80715143.PC	80715143	81882318			
MNEc.2.6.80719193.PC	80719193	81886368			
MNEc.2.6.80722266.PC	80722266	81889441			
MNEc.2.6.80722564.PC	80722564	81889739			
MNEc.2.6.80722978.PC	80722978	81890153			
MNEc.2.6.80724746.PC	80724746	81891921			
MNEc.2.6.80728189.PC	80728189	81895365			
MNEc.2.6.80728297.PC	80728297	81895473			
MNEc.2.6.80729934.PC	80729934	81897110			
MNEc.2.6.80732384.PC	80732384	81899560			
MNEc.2.6.80733830.PC	80733830	81901006			
MNEc.2.6.80736496.PC	80736496	81903675			
MNEc.2.6.80740274.PC	80740274	81907453			
MNEc.2.6.80740392.PC	80740392	81907571			
MNEc.2.6.80742798.PC	80742798	81909977			
MNEc.2.6.80742855.PC	80742855	81910034			
MNEc.2.6.80744646.PC	80744646	81911825			

Axiom MCEc2M SNP ID	EquCab2 BP Location	EquCab3 BP Location	Di	Height Assoc.	Insulin Assoc.
MNEc.2.6.80745841.BIEC2-1023976	80745841	81913021			
MNEc.2.6.80746678.PC	80746678	81913858			
MNEc.2.6.80747017.PC	80747017	81914197			
MNEc.2.6.80753124.PC	80753124	81920304			
MNEc.2.6.80753306.TBIEC2-1023979	80753306	81920486			
MNEc.2.6.80756605.PC	80756605	81923785			
MNEc.2.6.80756667.PC	80756667	81923847			
MNEc.2.6.80758159.PC	80758159	81925341			
MNEc.2.6.80758193.PC	80758193	81925375			
MNEc.2.6.80759692.PC	80759692	81926874			
MNEc.2.6.80763018.PC	80763018	81930200			
MNEc.2.6.80763384.PC	80763384	81930566			
MNEc.2.6.80763601.PC	80763601	81930783			
MNEc.2.6.80763751.PC	80763751	81930933			
MNEc.2.6.80766863.PC	80766863	81934045			
MNEc.2.6.80767981.PC	80767981	81935160			
MNEc.2.6.80768143.PC	80768143	81935322			
MNEc.2.6.80770476.PC	80770476	81937655			
MNEc.2.6.80772574.PC	80772574	81939753			
MNEc.2.6.80773747.PC	80773747	81940926			
MNEc.2.6.80783645.PC	80783645	81950822			
MNEc.2.6.80784128.PC	80784128	81951305		X	
MNEc.2.6.80785871.PC	80785871	81953011			
MNEc.2.6.80786333.PC	80786333	81953473			
MNEc.2.6.80787590.PC	80787590	81954730			
MNEc.2.6.80787822.PC	80787822	81954962			
MNEc.2.6.80790795.PC	80790795	81957936			
MNEc.2.6.80792111.TBIEC2-1023986	80792111	81959252			
MNEc.2.6.80792181.TBIEC2-1023987	80792181	81959322			
MNEc.2.6.80793324.PC	80793324	81960465			
MNEc.2.6.80794944.PC	80794944	81962085			
MNEc.2.6.80795347.PC	80795347	81962488			X
MNEc.2.6.80795503.PC	80795503	81962644			
MNEc.2.6.80796963.PC	80796963	81964104			
MNEc.2.6.80797343.PC	80797343	81964484			
MNEc.2.6.80801661.PC	80801661	81968699			
MNEc.2.6.80802867.PC	80802867	81969905			
MNEc.2.6.80806293.PC	80806293	81973331			
MNEc.2.6.80806580.PC	80806580	81973618		X	
MNEc.2.6.80807204.PC	80807204	81974242			
MNEc.2.6.80815186.PC	80815186	81982237			
MNEc.2.6.80815571.PC	80815571	81982623			
MNEc.2.6.80817011.PC	80817011	81984046			
MNEc.2.6.80818111.PC	80818111	81985146			
MNEc.2.6.80819060.PC	80819060	81986095			
MNEc.2.6.80820491.PC	80820491	81987526			
MNEc.2.6.80821993.PC	80821993	81989028			
MNEc.2.6.80824601.PC	80824601	81991636		X	
MNEc.2.6.80830385.PC	80830385	81997419			
MNEc.2.6.80830446.PC	80830446	81997480			
MNEc.2.6.80831282.PC	80831282	81998316			

Axiom MCEc2M SNP ID	EquCab2 BP Location	EquCab3 BP Location	Di	Height Assoc.	Insulin Assoc.
MNEc.2.6.80832084.PC	80832084	81999118			X
MNEc.2.6.80832207.PC	80832207	81999241			
MNEc.2.6.80833819.PC	80833819	82000854			
MNEc.2.6.80834462.PC	80834462	82001497			
MNEc.2.6.80834740.PC	80834740	82001775		X	
MNEc.2.6.80837012.PC	80837012	82004048			
MNEc.2.6.80837085.PC	80837085	82004121			
MNEc.2.6.80842128.PC	80842128	82009162			
MNEc.2.6.80842603.PC	80842603	82009637			
MNEc.2.6.80844424.PC	80844424	82011458		X	
MNEc.2.6.80844664.PC	80844664	82011698		X	
MNEc.2.6.80846341.PC	80846341	82013375			X
MNEc.2.6.80846756.PC	80846756	82013790			
MNEc.2.6.80848712.PC	80848712	82015746		X	
MNEc.2.6.80849310.PC	80849310	82016344			
MNEc.2.6.80849467.PC	80849467	82016501			
MNEc.2.6.80850749.PC	80850749	82017783			
MNEc.2.6.80851196.BIEC2-1024008	80851196	82018230			
MNEc.2.6.80855422.PC	80855422	82022458			
MNEc.2.6.80859332.PC	80859332	82026311			
MNEc.2.6.80859678.PC	80859678	82026657			
MNEc.2.6.80861680.PC	80861680	82028659			
MNEc.2.6.80862656.PC	80862656	82029635			
MNEc.2.6.80863356.PC	80863356	82030335			X
MNEc.2.6.80864497.PC	80864497	82031476			
MNEc.2.6.80865169.PC	80865169	82032148			
MNEc.2.6.80865774.PC	80865774	82032753		X	
MNEc.2.6.80865916.PC	80865916	82032895			
MNEc.2.6.80867332.PC	80867332	82034311			
MNEc.2.6.80867552.PC	80867552	82034531			
MNEc.2.6.80868281.PC	80868281	82035260			
MNEc.2.6.80868393.PC	80868393	82035372			
MNEc.2.6.80870148.PC	80870148	NA			
MNEc.2.6.80871158.PC	80871158	NA			
MNEc.2.6.80872239.PC	80872239	NA			
MNEc.2.6.80873525.PC	80873525	82037961			
MNEc.2.6.80877589.PC	80877589	82042029			
MNEc.2.6.80879383.PC	80879383	82043822			
MNEc.2.6.80879864.PC	80879864	82044303			
MNEc.2.6.80883323.PC	80883323	82047762			
MNEc.2.6.80885397.PC	80885397	82049836			X
MNEc.2.6.80887049.PC	80887049	82051488			
MNEc.2.6.80889551.PC	80889551	82053990			
MNEc.2.6.80890927.PC	80890927	82055366			
MNEc.2.6.80891737.PC	80891737	82056176			
MNEc.2.6.80893186.PC	80893186	82057625			
MNEc.2.6.80893468.PC	80893468	82057907			
MNEc.2.6.80900288.PC	80900288	82064728			
MNEc.2.6.80902137.PC	80902137	82066602			
MNEc.2.6.80902997.PC	80902997	82067462			
MNEc.2.6.80903581.PC	80903581	82068046			

Axiom MCEc2M SNP ID	EquCab2 BP Location	EquCab3 BP Location	Di	Height Assoc.	Insulin Assoc.
MNEc.2.6.80907156.PC	80907156	82071589			
MNEc.2.6.80911139.PC	80911139	82075571			
MNEc.2.6.80915201.PC	80915201	82079633			
MNEc.2.6.80915493.PC	80915493	82079925			
MNEc.2.6.80915581.PC	80915581	82080013		X	
MNEc.2.6.80917882.PC	80917882	82082314			
MNEc.2.6.80919604.PC	80919604	82084036			X
MNEc.2.6.80919807.PC	80919807	82084239			
MNEc.2.6.80920347.BIEC2-1024023	80920347	82084779			
MNEc.2.6.80926065.PC	80926065	82090497			
MNEc.2.6.80928463.PC	80928463	82092895			
MNEc.2.6.80929172.PC	80929172	82093604			
MNEc.2.6.80931312.PC	80931312	82095763			
MNEc.2.6.80933091.PC	80933091	82097541			
MNEc.2.6.80933683.PC	80933683	82098133			
MNEc.2.6.80933998.PC	80933998	82098448			
MNEc.2.6.80935302.PC	80935302	82099752			
MNEc.2.6.80935813.PC	80935813	82100263		X	
MNEc.2.6.80937306.PC	80937306	82101756			
MNEc.2.6.80939857.PC	80939857	82104307			
MNEc.2.6.80940129.PC	80940129	82104579			
MNEc.2.6.80942635.PC	80942635	82107085			
MNEc.2.6.80944105.PC	80944105	82108555			
MNEc.2.6.80945451.PC	80945451	82109901			
MNEc.2.6.80948795.PC	80948795	82113239			
MNEc.2.6.80948817.PC	80948817	82113261			
MNEc.2.6.80950340.PC	80950340	82114784			X
MNEc.2.6.80958104.PC	80958104	82122537			
MNEc.2.6.80958180.PC	80958180	82122613			
MNEc.2.6.80959050.PC	80959050	82123482			
MNEc.2.6.80960411.PC	80960411	82124573			
MNEc.2.6.80960850.PC	80960850	82125012			
MNEc.2.6.80961489.PC	80961489	82125651		X	
MNEc.2.6.80964432.PC	80964432	82128595		X	
MNEc.2.6.80968716.PC	80968716	82132880			
MNEc.2.6.80969726.PC	80969726	82133890			
MNEc.2.6.80971088.PC	80971088	82135252		X	
MNEc.2.6.80971929.PC	80971929	82136093			
MNEc.2.6.80976137.PC	80976137	82140301		X	
MNEc.2.6.80976600.PC	80976600	82140764			
MNEc.2.6.80976721.PC	80976721	82140885			
MNEc.2.6.80977285.PC	80977285	82141449			
MNEc.2.6.80977751.PC	80977751	82141915			
MNEc.2.6.80979433.PC	80979433	82143597			
MNEc.2.6.80980590.PC	80980590	82144754			
MNEc.2.6.80981134.PC	80981134	82145298			
MNEc.2.6.80981470.PC	80981470	82145634			
MNEc.2.6.80981691.PC	80981691	82145855			
MNEc.2.6.80984945.PC	80984945	82149109			
MNEc.2.6.80985350.PC	80985350	82149514			
MNEc.2.6.80987560.PC	80987560	82151724			

Axiom MCEc2M SNP ID	EquCab2 BP Location	EquCab3 BP Location	Di	Height Assoc.	Insulin Assoc.
MNEc.2.6.80988998.PC	80988998	82153162			
MNEc.2.6.80989356.PC	80989356	82153520	X		
MNEc.2.6.80994247.PC	80994247	82158411	X		
MNEc.2.6.81000288.PC	81000288	82164452	X	X	
MNEc.2.6.81001292.BIEC2-1024061	81001292	82165456	X		
MNEc.2.6.81001824.PC	81001824	82165988	X	X	
MNEc.2.6.81004640.PC	81004640	82168804	X	X	
MNEc.2.6.81004787.BIEC2-1024064	81004787	82168951	X		
MNEc.2.6.81004845.PC	81004845	82169009	X		
MNEc.2.6.81005329.PC	81005329	82169493	X		
MNEc.2.6.81011612.PC	81011612	82175776		X	
MNEc.2.6.81011857.PC	81011857	82176021			
MNEc.2.6.81012766.PC	81012766	82176930			
MNEc.2.6.81014209.PC	81014209	82178374			
MNEc.2.6.81018173.PC	81018173	82182338			
MNEc.2.6.81024712.PC	81024712	82188877			
MNEc.2.6.81028211.PC	81028211	82192376			
MNEc.2.6.81028417.PC	81028417	82192582			
MNEc.2.6.81029280.PC	81029280	82193445			
MNEc.2.6.81030458.PC	81030458	82194623			
MNEc.2.6.81040675.PC	81040675	82204840			
MNEc.2.6.81040813.PC	81040813	82204978			
MNEc.2.6.81040860.PC	81040860	82205025		X	
MNEc.2.6.81041470.PC	81041470	82205635			
MNEc.2.6.81041826.PC	81041826	82205991			
MNEc.2.6.81044828.PC	81044828	82208993			
MNEc.2.6.81046539.PC	81046539	82210704			
MNEc.2.6.81047385.PC	81047385	82211550			
MNEc.2.6.81048067.PC	81048067	82212232			
MNEc.2.6.81050533.PC	81050533	82214698			
MNEc.2.6.81053351.PC	81053351	82217515			
MNEc.2.6.81056567.PC	81056567	82220731			
MNEc.2.6.81057502.PC	81057502	82221666			
MNEc.2.6.81060020.PC	81060020	82224184			
MNEc.2.6.81066572.PC	81066572	82230736		X	X
MNEc.2.6.81072276.PC	81072276	82236440			
MNEc.2.6.81074062.PC	81074062	82238227			
MNEc.2.6.81074150.PC	81074150	82238315			
MNEc.2.6.81074374.PC	81074374	82238539		X	
MNEc.2.6.81074650.PC	81074650	82238815		X	
MNEc.2.6.81077322.PC	81077322	82241487			
MNEc.2.6.81082719.PC	81082719	82246884		X	
MNEc.2.6.81084493.PC	81084493	82248658			
MNEc.2.6.81084746.PC	81084746	82248911			
MNEc.2.6.81085399.PC	81085399	82249564		X	X
MNEc.2.6.81086049.PC	81086049	82250226			
MNEc.2.6.81088906.PC	81088906	82253083			
MNEc.2.6.81089958.PC	81089958	82254135		X	X
MNEc.2.6.81091853.PC	81091853	82256030			
MNEc.2.6.81092504.PC	81092504	82256681			
MNEc.2.6.81095746.PC	81095746	82269987			X

Axiom MCEc2M SNP ID	EquCab2 BP Location	EquCab3 BP Location	Di	Height Assoc.	Insulin Assoc.
MNEc.2.6.81092730.PC	81092730	82256907			
MNEc.2.6.81096691.PC	81096691	82260932			
MNEc.2.6.81097039.PC	81097039	82261280		X	
MNEc.2.6.81099063.BIEC2-1024097	81099063	82263304			X
MNEc.2.6.81100715.PC	81100715	82264956			
MNEc.2.6.81101410.PC	81101410	82265651		X	X
MNEc.2.6.81105042.PC	81105042	82269283			
MNEc.2.6.81107367.PC	81107367	82271611			
MNEc.2.6.81107765.PC	81107765	82272009			
MNEc.2.6.81108269.PC	81108269	82272513	X		
MNEc.2.6.81110483.PC	81110483	82274730	X		
MNEc.2.6.81111923.PC	81111923	82276170	X		
MNEc.2.6.81113370.PC	81113370	82277617	X		
MNEc.2.6.81114838.PC	81114838	82279085	X		
MNEc.2.6.81116592.PC	81116592	82280839	X		
MNEc.2.6.81116663.PC	81116663	82280910	X	X	
MNEc.2.6.81117653.PC	81117653	82281900	X		
MNEc.2.6.81127246.PC	81127246	82291777	X		
MNEc.2.6.81131003.PC	81131003	82295534	X	X	
MNEc.2.6.81132667.PC	81132667	82297198	X		
MNEc.2.6.81138611.PC	81138611	82303142	X		
MNEc.2.6.81145454.PC	81145454	82309986	X		
MNEc.2.6.81146607.PC	81146607	82311139	X		
MNEc.2.6.81147917.PC	81147917	82312449	X	X	
MNEc.2.6.81148466.PC	81148466	82312998	X		
MNEc.2.6.81148841.PC	81148841	82313373	X		
MNEc.2.6.81149038.PC	81149038	82313570	X	X	
MNEc.2.6.81150141.PC	81150141	82314673	X		
MNEc.2.6.81150674.PC	81150674	82315206	X		
MNEc.2.6.81150862.PC	81150862	82315394	X		
MNEc.2.6.81151323.PC	81151323	82315855	X	X	
MNEc.2.6.81152002.PC	81152002	82316534	X	X	
MNEc.2.6.81152832.PC	81152832	82317364	X		
MNEc.2.6.81154362.PC	81154362	82318894	X		
MNEc.2.6.81155025.PC	81155025	82319557	X	X	
MNEc.2.6.81155688.PC	81155688	82320220	X		
MNEc.2.6.81155869.PC	81155869	82320401	X	X	
MNEc.2.6.81156390.PC	81156390	82320922	X		
MNEc.2.6.81156975.PC	81156975	82321507	X		
MNEc.2.6.81157724.PC	81157724	82322256	X		
MNEc.2.6.81159639.PC	81159639	82324171			
MNEc.2.6.81160030.PC	81160030	82324562			
MNEc.2.6.81161980.PC	81161980	82326512			
MNEc.2.6.81167162.PC	81167162	82331694		X	
MNEc.2.6.81168395.PC	81168395	82332927			
MNEc.2.6.81168833.PC	81168833	82333365	X	X	
MNEc.2.6.81171121.PC	81171121	82335653	X	X	
MNEc.2.6.81175201.PC	81175201	82339734	X	X	
MNEc.2.6.81176493.BIEC2-1024128	81176493	82341026	X		
MNEc.2.6.81176653.BIEC2-1024129	81176653	82341186	X		
MNEc.2.6.81176905.PC	81176905	82341438	X		

Axiom MCEc2M SNP ID	EquCab2 BP Location	EquCab3 BP Location	Di	Height Assoc.	Insulin Assoc.
MNEc.2.6.81181575.PC	81181575	82346108	X		
MNEc.2.6.81183704.PC	81183704	82348237		X	
MNEc.2.6.81185362.PC	81185362	82349895		X	
MNEc.2.6.81193866.PC	81193866	82358399			
MNEc.2.6.81196676.PC	81196676	82361209		X	
MNEc.2.6.81197672.PC	81197672	82362205			
MNEc.2.6.81198310.PC	81198310	82362843		X	
MNEc.2.6.81198765.PC	81198765	82363298			
MNEc.2.6.81199128.PC	81199128	82363661			
MNEc.2.6.81199762.PC	81199762	82364295			
MNEc.2.6.81200192.PC	81200192	82364725			
MNEc.2.6.81200578.PC	81200578	82365111		X	
MNEc.2.6.81200658.PC	81200658	82365191			
MNEc.2.6.81200913.PC	81200913	82365446			
MNEc.2.6.81201314.PC	81201314	82365847			
MNEc.2.6.81201348.PC	81201348	82365881		X	
MNEc.2.6.81201373.PC	81201373	82365906			
MNEc.2.6.81203959.PC	81203959	82368492		X	
MNEc.2.6.81205065.PC	81205065	82369598			
MNEc.2.6.81205686.PC	81205686	82370219			
MNEc.2.6.81210715.PC	81210715	82375248			
MNEc.2.6.81213956.PC	81213956	82378489			
MNEc.2.6.81215555.PC	81215555	82380088		X	
MNEc.2.6.81216957.BIEC2-1024137	81216957	82381490		X	
MNEc.2.6.81218021.PC	81218021	82382554			
MNEc.2.6.81218092.PC	81218092	82382625			
MNEc.2.6.81218897.PC	81218897	82383430			
MNEc.2.6.81224318.PC	81224318	82388851			
MNEc.2.6.81227730.PC	81227730	82392263	X		
MNEc.2.6.81231288.PC	81231288	82395821	X		
MNEc.2.6.81231316.PC	81231316	82395849	X		
MNEc.2.6.81235378.PC	81235378	82399911	X	X	
MNEc.2.6.81236569.PC	81236569	82401102	X	X	
MNEc.2.6.81237287.PC	81237287	82401820	X	X	
MNEc.2.6.81242767.PC	81242767	82407300			
MNEc.2.6.81242979.PC	81242979	82407512			
MNEc.2.6.81245868.PC	81245868	82410401			
MNEc.2.6.81246188.PC	81246188	82410721			
MNEc.2.6.81250359.PC	81250359	82414892		X	
MNEc.2.6.81250799.PC	81250799	82415332		X	
MNEc.2.6.81252426.PC	81252426	82416959			
MNEc.2.6.81254844.PC	81254844	82419377			
MNEc.2.6.81257395.PC	81257395	82421926			
MNEc.2.6.81260218.PC	81260218	82424749			
MNEc.2.6.81260989.PC	81260989	82425520		X	
MNEc.2.6.81261983.PC	81261983	82426514			
MNEc.2.6.81263291.PC	81263291	82427823			
MNEc.2.6.81264617.PC	81264617	82429149			
MNEc.2.6.81265503.PC	81265503	82430033			
MNEc.2.6.81265743.PC	81265743	82430273			
MNEc.2.6.81265835.PC	81265835	82430365		X	

Axiom MCEc2M SNP ID	EquCab2 BP Location	EquCab3 BP Location	Di	Height Assoc.	Insulin Assoc.
MNEc.2.6.81274342.PC	81274342	82438510	X	X	
MNEc.2.6.81275539.PC	81275539	82439707	X		X
MNEc.2.6.81275716.PC	81275716	82439884	X		
MNEc.2.6.81280716.PC	81280716	82444884	X		
MNEc.2.6.81286888.PC	81286888	82451056	X	X	
MNEc.2.6.81288528.PC	81288528	82452696	X	X	
MNEc.2.6.81291848.PC	81291848	82456016	X		X
MNEc.2.6.81293583.PC	81293583	82457751	X	X	
MNEc.2.6.81300883.PC	81300883	82465051	X		
MNEc.2.6.81305201.PC	81305201	82469369			
MNEc.2.6.81307622.PC	81307622	82471790	X		
MNEc.2.6.81308993.PC	81308993	82473161	X		
MNEc.2.6.81309029.PC	81309029	82473197	X	X	
MNEc.2.6.81309194.PC	81309194	82473362	X	X	
MNEc.2.6.81309349.PC	81309349	82473517	X	X	X
MNEc.2.6.81310074.PC	81310074	82474242	X		
MNEc.2.6.81312462.PC	81312462	82476630	X		
MNEc.2.6.81312691.PC	81312691	82476859	X		
MNEc.2.6.81312805.PC	81312805	82476973	X		
MNEc.2.6.81313479.PC	81313479	82477647	X	X	
MNEc.2.6.81320405.PC	81320405	82484592	X	X	
MNEc.2.6.81322229.PC	81322229	82486416	X	X	X
MNEc.2.6.81329646.PC	81329646	82493449	X		
MNEc.2.6.81333137.PC	81333137	82496940		X	
MNEc.2.6.81333372.PC	81333372	82497175			X
MNEc.2.6.81340647.PC	81340647	82504450	X	X	
MNEc.2.6.81340998.PC	81340998	80204801	X		X
MNEc.2.6.81342894.PC	81342894	82506697	X		
MNEc.2.6.81344532.PC	81344532	82508335	X		X
MNEc.2.6.81348453.PC	81348453	82512256	X		X
MNEc.2.6.81347830.PC	81347830	82511633	X		
MNEc.2.6.81347974.PC	81347974	82511777	X		
MNEc.2.6.81352276.PC	81352276	82516073	X		
MNEc.2.6.81354701.PC	81354701	82518498			
MNEc.2.6.81356993.PC	81356993	82520790		X	
MNEc.2.6.81358887.PC	81358887	82522684			
MNEc.2.6.81361483.PC	81361483	82525280	X	X	
MNEc.2.6.81361520.PC	81361520	82525317	X		
MNEc.2.6.81365395.PC	81365395	82529192	X	X	
MNEc.2.6.81367697.PC	81367697	82531494	X		
MNEc.2.6.81368345.PC	81368345	82532142	X	X	
MNEc.2.6.81381221.PC	81381221	82545021	X	X	
MNEc.2.6.81382533.PC	81382533	82546333	X		X
MNEc.2.6.81392217.PC	81392217	82555953	X		
MNEc.2.6.81392910.PC	81392910	82556646		X	
MNEc.2.6.81396654.PC	81396654	82560390			
MNEc.2.6.81398600.PC	81398600	82562336			
MNEc.2.6.81400279.PC	81400279	82564015		X	X
MNEc.2.6.81405725.PC	81405725	82569461	X	X	X
MNEc.2.6.81407183.PC	81407183	82570919	X	X	
MNEc.2.6.81408708.PC	81408708	82572444	X		

Axiom MCEc2M SNP ID	EquCab2 BP Location	EquCab3 BP Location	Di	Height Assoc.	Insulin Assoc.
MNEc.2.6.81409678.PC	81409678	82573414	X		
MNEc.2.6.81411449.PC	81411449	82575185	X	X	
MNEc.2.6.81413254.PC	81413254	82576990	X	X	X
MNEc.2.6.81414435.PC	81414435	82578171	X		
MNEc.2.6.81415276.PC	81415276	82579013	X		
MNEc.2.6.81417632.BIEC2-1024187	81417632	82581369	X		
MNEc.2.6.81421330.PC	81421330	82585066	X	X	X
MNEc.2.6.81431568.PC	81431568	82595304	X		X
MNEc.2.6.81432131.PC	81432131	82595867	X		X
MNEc.2.6.81434058.PC	81434058	82597794	X	X	
MNEc.2.6.81440665.PC	81440665	82604401	X	X	
MNEc.2.6.81441526.PC	81441526	82605262	X		
MNEc.2.6.81443295.PC	81443295	82607030	X		X
MNEc.2.6.81446353.PC	81446353	82610088	X		X
MNEc.2.6.81451782.BIEC2-1024200	81451782	82615517	X	X	X
MNEc.2.6.81458759.PC	81458759	82622494	X	X	X
MNEc.2.6.81463114.PC	81463114	82626849	X	X	X
MNEc.2.6.81468176.PC	81468176	82631911	X		
MNEc.2.6.81469661.PC	81469661	82633396	X		
MNEc.2.6.81468256.PC	81468256	82631991	X		X
MNEc.2.6.81471494.PC	81471494	82635229	X		
MNEc.2.6.81473575.PC	81473575	82637310	X		X
MNEc.2.6.81474930.PC	81474930	82638665	X	X	
MNEc.2.6.81475049.PC	81475049	82638784	X	X	
MNEc.2.6.81476437.PC	81476437	82640172	X	X	X
MNEc.2.6.81481065.PC	81481065	82644800			X
MNEc.2.6.81482862.PC	81482862	82646597			
MNEc.2.6.81488131.PC	81488131	82651920		X	
MNEc.2.6.81490123.PC	81490123	82653915	X	X	X
MNEc.2.6.81492423.PC	81492423	82656215	X	X	X
MNEc.2.6.81494335.PC	81494335	82658127	X	X	
MNEc.2.6.81497380.PC	81497380	82661169	X	X	X
MNEc.2.6.81498052.PC	81498052	82661841	X	X	
MNEc.2.6.81503348.PC	81503348	82667137	X		
MNEc.2.6.81503730.PC	81503730	82667518	X		X
MNEc.2.6.81505709.PC	81505709	82669497	X	X	X
MNEc.2.6.81506349.PC	81506349	82670137	X		
MNEc.2.6.81507212.PC	81507212	82671000	X	X	X
MNEc.2.6.81507310.PC	81507310	82671098	X	X	X
MNEc.2.6.81508624.PC	81508624	82672412	X		
MNEc.2.6.81509429.TBIEC2-1024215	81509429	82673217	X		
MNEc.2.6.81510788.PC	81510788	82674576	X		
MNEc.2.6.81514907.PC	81514907	82678695	X	X	X
MNEc.2.6.81516706.BIEC2-1024218	81516706	82680494	X	X	
MNEc.2.6.81521876.PC	81521876	82685665	X	X	
MNEc.2.6.81523773.PC	81523773	82687562	X	X	X
MNEc.2.6.81523837.PC	81523837	82687626	X		X
MNEc.2.6.81526828.PC	81526828	82690617	X	X	X
MNEc.2.6.81527285.PC	81527285	82691074	X		
MNEc.2.6.81528014.PC	81528014	82691803	X	X	
MNEc.2.6.81532654.PC	81532654	82696455	X		X

Axiom MCEc2M SNP ID	EquCab2 BP Location	EquCab3 BP Location	Di	Height Assoc.	Insulin Assoc.
MNEc.2.6.81533130.PC	81533130	82696931	X	X	
MNEc.2.6.81533415.PC	81533415	82697216	X	X	X
MNEc.2.6.81533975.PC	81533975	82697776	X	X	X
MNEc.2.6.81535308.PC	81535308	82699109	X		
MNEc.2.6.81536480.PC	81536480	82700281	X	X	
MNEc.2.6.81536796.PC	81536796	82700597	X		
MNEc.2.6.81541746.PC	81541746	82705547		X	
MNEc.2.6.81551984.PC	81551984	82715786	X	X	
MNEc.2.6.81553061.PC	81553061	82716863	X		X
MNEc.2.6.81554945.PC	81554945	82718747	X		
MNEc.2.6.81557294.BIEC2-1024233	81557294	82721096	X	X	X
MNEc.2.6.81558781.PC	81558781	82722583	X		
MNEc.2.6.81560279.PC	81560279	82724081	X		
MNEc.2.6.81566120.PC	81566120	82729921	X	X	
MNEc.2.6.81568749.PC	81568749	82732548	X	X	X
MNEc.2.6.81575176.PC	81575176	82738976	X		
MNEc.2.6.81575713.PC	81575713	82739513	X	X	
MNEc.2.6.81576419.PC	81576419	82740219	X		
MNEc.2.6.81576767.PC	81576767	82740567	X		
MNEc.2.6.81577868.PC	81577868	82741668	X		
MNEc.2.6.81583349.PC	81583349	82747149			
MNEc.2.6.81583507.PC	81583507	82747307			
MNEc.2.6.81585047.PC	81585047	82748847			
MNEc.2.6.81589592.PC	81589592	82753392	X		
MNEc.2.6.81590012.PC	81590012	82753812	X		
MNEc.2.6.81591558.PC	81591558	82755358	X	X	
MNEc.2.6.81591919.PC	81591919	82755719	X		
MNEc.2.6.81600981.PC	81600981	82764783	X		
MNEc.2.6.81602184.PC	81602184	82765986	X		
MNEc.2.6.81602630.BIEC2-1024255	81602630	82766432	X		
MNEc.2.6.81602938.PC	81602938	82766740	X	X	
MNEc.2.6.81603378.PC	81603378	82767180	X		
MNEc.2.6.81605181.PC	81605181	82768983	X	X	
MNEc.2.6.81605475.PC	81605475	82769277	X		
MNEc.2.6.81612750.PC	81612750	82776553	X		
MNEc.2.6.81614184.PC	81614184	82777987	X		
MNEc.2.6.81614934.PC	81614934	82778737	X		
MNEc.2.6.81615849.PC	81615849	82779652	X	X	
MNEc.2.6.81624548.PC	81624548	82788363	X		
MNEc.2.6.81625635.PC	81625635	82789450	X		
MNEc.2.6.81626239.PC	81626239	82790054	X	X	
MNEc.2.6.81634717.PC	81634717	82798532	X	X	
MNEc.2.6.81635994.PC	81635994	82799809	X		
MNEc.2.6.81637171.PC	81637171	82800986	X		
MNEc.2.6.81643314.BIEC2-971389	81643314	82807129	X		X
MNEc.2.6.81647854.PC	81647854	82811669	X		
MNEc.2.6.81649941.PC	81649941	82813756	X		
MNEc.2.6.81653476.PC	81653476	82817291			X
MNEc.2.6.81663656.PC	81663656	82827472			
MNEc.2.6.81664538.PC	81664538	82828354			
MNEc.2.6.81666343.PC	81666343	82830159		X	

Axiom MCEc2M SNP ID	EquCab2 BP Location	EquCab3 BP Location	Di	Height Assoc.	Insulin Assoc.
MNEc.2.6.81666520.PC	81666520	82830336			
MNEc.2.6.81669670.PC	81669670	82833486		X	
MNEc.2.6.81671214.PC	81671214	82835030	X		
MNEc.2.6.81694523.PC	81694523	82858459	X		
MNEc.2.6.81695495.PC	81695495	82859431	X	X	
MNEc.2.6.81695968.PC	81695968	82859904	X		
MNEc.2.6.81696642.PC	81696642	82860578	X		
MNEc.2.6.81700931.PC	81700931	82864787			
MNEc.2.6.81703726.PC	81703726	82867582			
MNEc.2.6.81705123.PC	81705123	82868979			
MNEc.2.6.81707385.PC	81707385	82871241	X	X	
MNEc.2.6.81710589.PC	81710589	82874445	X		
MNEc.2.6.81711770.PC	81711770	82875626	X		
MNEc.2.6.81715109.PC	81715109	82878965	X		
MNEc.2.6.81720090.PC	81720090	82883946	X		
MNEc.2.6.81722649.PC	81722649	82886505	X	X	
MNEc.2.6.81722944.PC	81722944	82886800	X		
MNEc.2.6.81725228.PC	81725228	82889084	X		
MNEc.2.6.81727663.PC	81727663	82891519	X		
MNEc.2.6.81728172.PC	81728172	82892028	X		
MNEc.2.6.81735717.PC	81735717	82899573	X		
MNEc.2.6.81740361.PC	81740361	82904217	X		
MNEc.2.6.81742978.PC	81742978	82906837	X		
MNEc.2.6.81749291.PC	81749291	82913150	X		
MNEc.2.6.81752110.PC	81752110	82915969	X	X	
MNEc.2.6.81753106.PC	81753106	82916923	X		
MNEc.2.6.81753656.PC	81753656	82917473	X		
MNEc.2.6.81755922.PC	81755922	82919739	X	X	
MNEc.2.6.81759471.PC	81759471	82923288	X		
MNEc.2.6.81764808.PC	81764808	82928625	X		
MNEc.2.6.81764849.PC	81764849	82928666	X	X	
MNEc.2.6.81766028.PC	81766028	82929796	X		
MNEc.2.6.81774220.PC	81774220	82937922	X		
MNEc.2.6.81774286.PC	81774286	82937988	X		
MNEc.2.6.81777995.PC	81777995	82941697	X		
MNEc.2.6.81780992.PC	81780992	82944695	X	X	
MNEc.2.6.81782298.PC	81782298	82946001	X		
MNEc.2.6.81784570.PC	81784570	82948273	X		
MNEc.2.6.81785714.PC	81785714	82949417	X		
MNEc.2.6.81788701.PC	81788701	82952403	X		
MNEc.2.6.81789212.PC	81789212	82952914	X		
MNEc.2.6.81791707.PC	81791707	82955409			
MNEc.2.6.81793853.PC	81793853	82957368			
MNEc.2.6.81795218.PC	81795218	82958733			
MNEc.2.6.81795964.PC	81795964	82959479			
MNEc.2.6.81796099.PC	81796099	82959614			
MNEc.2.6.81799715.PC	81799715	82963230			
MNEc.2.6.81801026.PC	81801026	82964541			
MNEc.2.6.81802027.PC	81802027	82965542			
MNEc.2.6.81802264.PC	81802264	82965779			
MNEc.2.6.81804903.PC	81804903	82968419			

Axiom MCEc2M SNP ID	EquCab2 BP Location	EquCab3 BP Location	Di	Height Assoc.	Insulin Assoc.
MNEc.2.6.81806445.PC	81806445	82969961			
MNEc.2.6.81808008.PC	81808008	82971523		X	
MNEc.2.6.81809066.PC	81809066	82972582			

Supplemental Table 6: EquCab2 and EquCab3 base pair (bp) position for SNPs on the Axiom MCEc2M within the region of interest on equine chromosome 6 (ECA6) bp positions 80,499,826-81,809,066. SNPs (presented by their Axiom MCEc2M SNP ID) within the entire region of interest were remapped to EquCab3 (manuscript in preparation: Beeson S., Schaefer R., Mason V., McCue M.. "Robust remapping of equine SNP array coordinates to EquCab3."). EquCab3 coordinates were not provided for three SNPs as they did not have probes that mapped uniquely to EquCab3. SNPs which exceeded the threshold for genome wide significance on association analysis (Assoc) for height and baseline insulin are indicated by an X. Significant di windows are based on the average base pair position within a 10Kb window of SNPs. SNPs marked with an X represent 5Kb upstream and 5Kb downstream of the base pair location.

Breed	INS	INS-OST	GLU	GLU-OST	NEFA	TG	LEPTIN	ADIPON	ACTH
All Horses n=830	-.15 (-.21, -.079) p<.001	-.053 (-.13, .019) p=.15	-.14 (-.21, -.076) p<.001	-.10 (-.18, -.031) p=.0051	-.063 (-.13, .005) p=.069	.12 (.055, .19) p<.001	.12 (.048, .18) p<.001	-.22 (-.21,0.15) p<.001	-.13 (-.19, -.060) p<.001
Ponies n=301	-.33 (-.42, -.29) p<.001	-.15 (-.26, -.038) p=.0092	-.14 (-.25, -.027) p=.015	-.019 (-.13, .097) p=.75	-.12 (-.23, 0) p=.043	-.14 (-.087, -.03) p=.013	-.091 (-.20, -.023) p=.12	-.069 (-.045, -.18) p=.24	-.13 (-.24, -.019) p=.022

Supplemental Table 7: Correlations between height and biochemical traits with the addition of seven ponies. Pearson's correlation coefficients were repeated with the inclusion of seven ponies representing three Shetland ponies, two Hackney ponies, and three British Riding ponies. Presented in the table are: Pearson's correlation coefficients, 95% confidence intervals and p-values for height, eight EMS biochemical traits, and ACTH for the entire cohort as well as just the ponies. All traits were corrected for age and sex prior to analysis. Significant p-values (<.0056) are in bolded text. Abbreviations: INS = insulin, INS-OST = insulin post oral sugar test, GLU = glucose, GLU-OST = glucose post oral sugar test, NEFA = non-esterified fatty acids, TG = triglycerides, ADIPON = adiponectin.