

**Table S1.** Horse orthologous genes which have variants causing non-synonymous substitutions

Gene ID	Full Name	Gene Symbol	Chromosome	Position
ENSECAG00000023711	fatty acid amide hydrolase	<i>FAAH</i>	2	12167952
				12174477
				12174492
ENSECAG00000018928	period circadian regulator 3	<i>PER3</i>	2	43209639
				43231315
				43240108
ENSECAG00000021162	cadherin 13	<i>CDH13</i>	3	31079056
				31230472
				31382147
				31845727
ENSECAG00000008726	neuropeptide Y	<i>NPY</i>	4	55899514
ENSECAG00000030283	leptin	<i>LEP</i>	4	83529565
ENSECAG00000019243	hydroxysteroid 11-beta dehydrogenase 1	<i>HSD11B1</i>	5	25786262
ENSECAG00000011781	ankyrin repeat and kinase domain containing 1	<i>ANKK1</i>	7	22319266
				22319267
				22319365
				22319396
				22319430
				22319446
				22319470
				22326586
				22327351
				22329824
ENSECAG00000013567	dopamine receptor D2	<i>DRD2</i>	7	22330242
				22331004
				22331042
ENSECAG00000015952	brain derived neurotrophic factor	<i>BDNF</i>	7	22348064
ENSECAG00000005359	catechol-O-methyltransferase	<i>COMT</i>	8	96310373
				434481
ENSECAG00000009949	purinergic receptor P2X 7	<i>P2RX7</i>	8	432351
				24214858
ENSECAG00000008236	apolipoprotein E	<i>APOE</i>	10	15713778
				15714427

15714824				
ENSECAG00000012581	cannabinoid receptor 1	<i>CNR1</i>	10	41805559
ENSECAG00000017112	solute carrier family 6 member 4	<i>SLC6A4</i>	11	44188160
				44188161
				44192165
				44200439
ENSECAG00000014012	gamma-aminobutyric acid type A receptor subunit alpha6	<i>GABRA6</i>	14	17329705
				17329709
				17329851
				17329886
				17338413
				17343960
ENSECAG00000024282	5-hydroxytryptamine receptor 2A	<i>HTR2A</i>	17	23797786
ENSECAG00000000237	diacylglycerol kinase eta	<i>DGKH</i>	17	27918092
				28048492
ENSECAG00000022277	monoamine oxidase A	<i>MAOA</i>	X	36799409
				36799613
				36800118
				36800211
				36800238
				36800403
				36801932

Gene ID: The identification ID used in Ensembl Genome Browser.