

Table S8 KEGG pathway enrichment analysis of genes harboring nonsynonymous (missense) variants.

Term	Database	ID	Input number	Background numl	P-Value	Corrected P-Value
Calcium signaling pathway	KEGG PATHWAY	cfa04020	42	191	1.45471E-09	4.55323E-07
Pathways in cancer	KEGG PATHWAY	cfa05200	74	525	7.42253E-08	8.47592E-06
Metabolic pathways	KEGG PATHWAY	cfa01100	152	1378	8.12388E-08	8.47592E-06
ABC transporters	KEGG PATHWAY	cfa02010	18	48	1.26237E-07	9.87807E-06
ECM-receptor interaction	KEGG PATHWAY	cfa04512	23	86	4.08564E-07	2.46323E-05
Dilated cardiomyopathy (DCM)	KEGG PATHWAY	cfa05414	24	94	4.72184E-07	2.46323E-05
Human papillomavirus infection	KEGG PATHWAY	cfa05165	51	328	6.12165E-07	2.73725E-05
Oxytocin signaling pathway	KEGG PATHWAY	cfa04921	31	151	7.10685E-07	2.78055E-05
Apelin signaling pathway	KEGG PATHWAY	cfa04371	29	136	8.23724E-07	2.86473E-05
Thyroid hormone signaling pathway	KEGG PATHWAY	cfa04919	26	116	1.3477E-06	3.95394E-05
cAMP signaling pathway	KEGG PATHWAY	cfa04024	37	209	1.50175E-06	3.95394E-05
Aldosterone synthesis and secretion	KEGG PATHWAY	cfa04925	23	94	1.51589E-06	3.95394E-05
PI3K-Akt signaling pathway	KEGG PATHWAY	cfa04151	52	355	2.30273E-06	5.54428E-05
Hypertrophic cardiomyopathy (HCM)	KEGG PATHWAY	cfa05410	22	91	3.00314E-06	6.71417E-05
Inositol phosphate metabolism	KEGG PATHWAY	cfa00562	19	72	4.77848E-06	9.97109E-05
MAPK signaling pathway	KEGG PATHWAY	cfa04010	44	289	5.64969E-06	0.000110522
Phosphatidylinositol signaling system	KEGG PATHWAY	cfa04070	22	97	7.2499E-06	0.000133484
Regulation of actin cytoskeleton	KEGG PATHWAY	cfa04810	35	213	1.19469E-05	0.000207744
Rap1 signaling pathway	KEGG PATHWAY	cfa04015	34	210	2.07045E-05	0.000324763
Glutamatergic synapse	KEGG PATHWAY	cfa04724	23	113	2.07516E-05	0.000324763