

## SUPPLEMENTARY TABLES

Please browse Full Text version to see the data of Supplementary Tables 1–6

**Supplementary Table 1. Amplified 247 genes.**

**Supplementary Table 2. 302 genes with significant mutation frequencies.**

**Supplementary Table 3. Information of training set.**

**Supplementary Table 4. Clinical information of training set.**

**Supplementary Table 5. Information of test set.**

**Supplementary Table 6. Clinical information of test set.**

**Supplementary Table 7. The top twenty enriched pathways.**

NAME	SIZE	ES	NES	NOM p-val	FDR q-val	FWER p-val
KEGG_ADHERENS_JUNCTION	73	0.604583	1.982844	0	0.076978	0.042
KEGG_FOCAL_ADHESION	199	0.548716	1.832598	0.014199	0.257997	0.24
KEGG_PATHOGENIC_ESCHERICHIA_COLI_INFECTION	55	0.478323	1.751252	0.00789	0.378554	0.417
KEGG_RENAL_CELL_CARCINOMA	70	0.464708	1.714178	0.00996	0.388839	0.51
KEGG_REGULATION_OF_ACTIN_CYTOSKELETON	212	0.423736	1.680424	0.010267	0.402515	0.592
KEGG_ECM_RECEPTOR_INTERACTION	83	0.595027	1.672061	0.061181	0.35479	0.61
KEGG_AXON_GUIDANCE	128	0.43319	1.669205	0.006424	0.310781	0.615
KEGG_TGF_BETA_SIGNALING_PATHWAY	85	0.465713	1.622249	0.027668	0.380817	0.719
KEGG_WNT_SIGNALING_PATHWAY	149	0.398066	1.59946	0.010616	0.392898	0.76
KEGG_GAP_JUNCTION	89	0.424439	1.583867	0.023207	0.388653	0.785
KEGG_THYROID_CANCER	29	0.468404	1.56782	0.044834	0.391882	0.81
KEGG_ERBB_SIGNALING_PATHWAY	87	0.420793	1.547303	0.025263	0.403438	0.829
KEGG_ARRHYTHMOGENIC_RIGHT_VENTRICULAR_CARDIOMYOPATHY_ARVC	74	0.473225	1.542216	0.066528	0.383884	0.835
KEGG_TIGHT_JUNCTION	130	0.381005	1.530401	0.041152	0.382432	0.847
KEGG_PATHWAYS_IN_CANCER	324	0.360142	1.497865	0.035124	0.433172	0.884
KEGG_VIBRIO_CHOLERAЕ_INFECTION	52	0.40149	1.483408	0.036961	0.442476	0.894
KEGG_PANCREATIC_CANCER	70	0.408252	1.476431	0.065606	0.43181	0.897
KEGG_ALPHA_LINOLENIC_ACID_METABOLISM	19	-0.72946	-2.11189	0	0.012797	0.009
KEGG_LINOLEIC_ACID_METABOLISM	29	-0.64152	-1.84077	0.001976	0.215058	0.23
KEGG_ARACHIDONIC_ACID_METABOLISM	57	-0.52228	-1.82148	0.005952	0.168108	0.266
KEGG_INTESTINAL_IMMUNE_NETWORK_FOR_IGA_PRODUCTION	46	-0.61053	-1.62009	0.067864	0.626243	0.702