

Supplementary Table S1. Number of samples in each class used in the classification.

Cancer Tumor	Number of samples(%)	Training($\approx$ 80%)	Testing($\approx$ 20%)
Stomach Cancer(STAD)	380(12)	304	76
Lung Cancer(LUNG)	1019(32)	815	204
Breast Cancer(BRCA)	1104(35)	883	221
Cervical Cancer(CESC)	305(10)	244	61
Liver Cancer(LIHC)	373(11)	298	75
Total	3181	2544	637