

**Table S1.** Aminoacyl-tRNA synthetases

Symbol	Name
AARS	Alanyl-tRNA synthetase
CARS	Cysteinyl-tRNA synthetase
DARS	Aspartyl-tRNA synthetase
EPRS	Glutamyl-prolyl-tRNA synthetase
FARSA	Phenylalanyl-tRNA synthetase subunit alpha
FARSB	Phenylalanyl-tRNA synthetase subunit beta
GARS	Glycyl-tRNA synthetase
HARS	Histidyl-tRNA synthetase
IARS	Isoleucyl-tRNA synthetase
KARS	Lysyl-tRNA synthetase
LARS	Leucyl-tRNA synthetase
MARS	Methionyl-tRNA synthetase
NARS	Asparaginyl-tRNA synthetase
QARS	Glutaminyl-tRNA synthetase
RARS	Arginyl-tRNA synthetase
SARS	Seryl-tRNA synthetase
TARS	Threonyl-tRNA synthetase
VARs	Valyl-tRNA synthetase
WARS	Tryptophanyl-tRNA synthetase
YARS	Tyrosyl-tRNA synthetase

**Table S2.** TCGA cancer types and sample numbers per TCGA dataset. N: Normal, T: Tumour.

Symbol	Name	DNA (N)	DNA (T)	mRNA (N)	mRNA (T)	tRNA (N)	tRNA (T)
BRCA	Breast Invasive Carcinoma	139	1101	113	1092	104	1077
HNSC	Head And Neck Squamous Cell Carcinoma	74	528	44	518	44	523
KIRC	Kidney Renal Clear Cell Carcinoma	407	538	129	530	71	516
KIRP	Kidney Renal Papillary Cell Carcinoma	60	292	129	288	34	290
LIHC	Liver Hepatocellular Carcinoma	59	377	50	369	50	372
LUAD	Lung Adenocarcinoma	120	520	109	513	45	514
LUSC	Lung Squamous Cell Carcinoma	120	506	109	498	45	476
PRAD	Prostate Adenocarcinoma	67	498	52	495	52	483
STAD	Stomach Adenocarcinoma	102	478	36	414	37	409
THCA	Thyroid Carcinoma	65	507	59	504	71	510