

A)

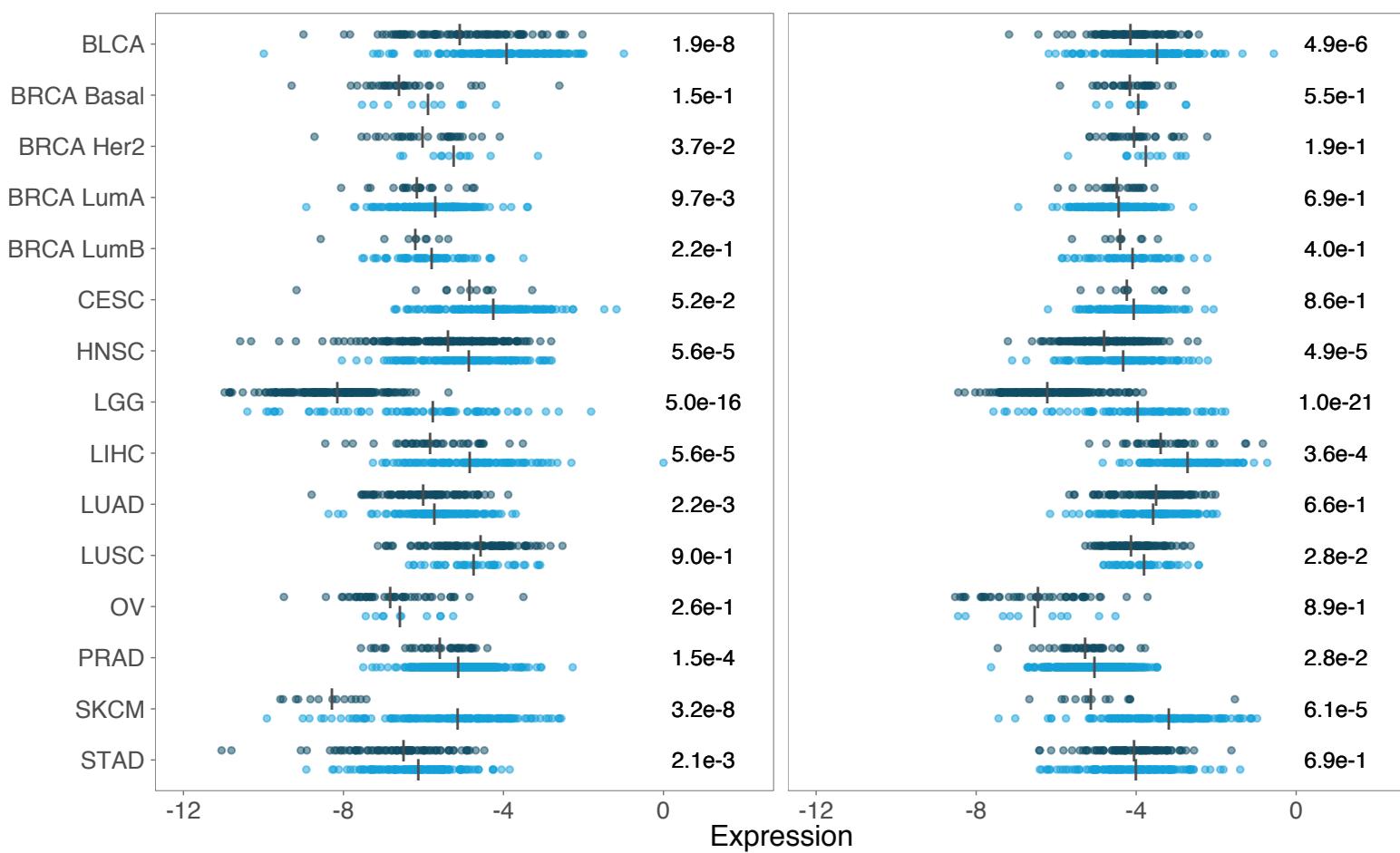
cancer	all n	all rho	all p	TP53wt n	TP53wt rho	TP53wt p	TP53mut n	TP53mut rho	TP53mut p
Adrenocortical carcinoma (ACC)	10	0.55	1.04e-01	10	0.55	1.04e-01	NA	NA	NA
Bladder Urothelial Carcinoma (BLCA)	228	0.51	7.89e-17	134	0.45	3.86e-08	94	0.43	1.73e-05
Breast invasive carcinoma (BRCA) Basal	42	0.57	9.54e-05	10	0.62	6.02e-02	32	0.57	7.41e-04
Breast invasive carcinoma (BRCA) Her2	44	0.15	3.39e-01	12	0.22	4.85e-01	32	0.07	7.10e-01
Breast invasive carcinoma (BRCA) LumA	199	0.34	8.22e-07	177	0.34	2.96e-06	22	0.49	2.31e-02
Breast invasive carcinoma (BRCA) LumB	70	0.17	1.57e-01	61	0.15	2.53e-01	9	0.17	6.78e-01
Cervical squamous cell carcinoma and endocervical adenocarcinoma (CESC)	156	0.14	8.37e-02	145	0.16	5.45e-02	11	-0.05	9.03e-01
Head and Neck squamous cell carcinoma (HNSC)	313	0.54	8.38e-25	123	0.61	0.00e+00	190	0.45	9.68e-11
Kidney Chromophobe (KICH)	5	0.60	3.50e-01	5	0.60	3.50e-01	NA	NA	NA
Kidney renal clear cell carcinoma (KIRC)	142	0.35	2.06e-05	141	0.34	4.41e-05	NA	NA	NA
Kidney renal papillary cell carcinoma (KIRP)	167	0.45	9.16e-10	163	0.45	2.04e-09	4	0.80	3.33e-01
Brain Lower Grade Glioma (LGG)	271	0.63	9.92e-32	76	0.73	0.00e+00	195	0.39	2.26e-08
Liver hepatocellular carcinoma (LIHC)	153	0.56	3.64e-14	114	0.52	4.18e-09	39	0.45	3.95e-03
Lung adenocarcinoma (LUAD)	234	0.28	1.15e-05	128	0.36	2.87e-05	106	0.23	1.91e-02
Lung squamous cell carcinoma (LUSC)	139	0.23	6.74e-03	42	0.04	7.93e-01	97	0.33	9.91e-04
Ovarian serous cystadenocarcinoma (OV)	56	0.23	8.37e-02	10	0.84	4.46e-03	46	0.15	3.31e-01
Prostate adenocarcinoma (PRAD)	413	0.47	1.33e-23	375	0.46	6.13e-21	38	0.45	4.58e-03
Skin Cutaneous Melanoma (SKCM)	165	0.65	5.43e-21	152	0.61	7.85e-17	13	0.43	1.40e-01
Stomach adenocarcinoma (STAD)	225	0.37	8.23e-09	145	0.37	5.71e-06	80	0.42	1.03e-04
Thyroid carcinoma (THCA)	469	0.46	1.07e-25	467	0.46	4.06e-26	NA	NA	NA

B)

TP53 status ● wt ● mut

lncTAM34a

miR34a



Supplementary Figure 1: A) Spearman's rho and P values (p) from the correlation analysis in Figure 1a between miR34a and IncTAM34a expression in TP53 wild type (wt) and mutated (mut) samples within TCGA cancer types. NA indicates not applicable, due to a lack of data for the specific group. **B)** Expression levels of miR34a and IncTAM34a in TP53 wt and nonsynonymous mutation samples. Expression was quantified by the log2 ratio of expression of the gene to its maximal expression value. Vertical lines indicate the median. P values are indicated on the right side of each panel and are derived from comparing the TP53 wild type samples to the samples with a nonsynonymous mutation using a two-sided Wilcoxon signed rank test. Only cancers that had at least 5 samples per group were included. In addition, only samples that were diploid at the miR34a locus were used for the analysis to avoid copy number bias.