

Supplementary Materials

Tables

Table S1. PCR primers used in this study

Gene Symbol	Entrez ID		RT-qPCR primers (5'-3')	ChIP qPCR primers (5'-3')
B2M	567	F	AGGCTATCCAGCGTACTCCA	CATCCATCCATTTCGTTCAATCGG
		R	ACACGGCAGGCATACTCATC	GCCAAGAAGTTCCTCCCTATGTC
FEZF1	389549	F	TTGCGAAGTGTGTGGAAAGGTCT	
		R	ACTGGCATGTGACGGGTAAAGTT	
TCF7L2	6934	F	GTACCACAGCAAGGTCAACCAGT	GTGGGCATCTGAGTTTCTTCTGG
		R	CCGTCGTGTGTAGCGTATGATGT	GTGCGAGTTTGCCTTTGGTTGT
JUN	3725	F	GTGGGTGCCAACTCATGCTAAC	GATTTACAGCCACAGGCAGGATAT
		R	CCTTGGCTTTAGTTCTCGGACAC	AAGGCAGTGCTTAAACAAGGGAAC
CCND1	595	F	CCGCACGATTTTCATTGAACACT	AACTACCTGGACCGCTTCCTGT
		R	GCGGATTGGAAATGAACTTCACA	CGGATGGAGTTGTCGGTGTAGA
MAPK10	5602	F	GCATCCCTACATCAACGTCTGGT	CCAACCCAAGGCAAATAAAACATC
		R	TCTCACTGCTGTTCACTGCTGC	TTCCTAATTGATTGCTCAGTTGGAC
CAMK2D	817	F	GAAAGAGAAGCTAGAATCTGCCG	CTGCCATTGTTTTTCAGTAGGAGG
		R	GTCTTCAAACAGTTCACCTCCAG	CATAACGCTGTTTTTGGTCTGC
PPP3CA	5530	F	GATGCCTGTATGGATGCCTTTG	CCAATGACATCACCACAGGCTTT
		R	CAGGTGGTTCTTTGAATCGGTC	TTTCAGCTTGGCTTCTGTTACAG
NFATC2	4773	F	CACCAAAGTCCTGGAGATACCT	TCATAAATCCTGAGCTTTGCTGGC
		R	CACTGGACTCTGGGATGTGAACT	GCAGAGTGGGGAGATTGCTTTTC
CTNNB1	1499	F	CTGCTGATCTTGGACTTGATATTGG	
		R	CATATCCACCAGAGTGAAAAGAACG	

Table S2. FEZF1 expression level in the CESC patients from TCGA with different clinicopathological characteristics

Characteristics		N	FEZF1 expression [†] ±SD	P
Age	<50	115	3.016±1.855	0.3365
	≥50	79	3.282±1.942	
Histologic type	Squamous cell	160	3.204±1.922	0.2054
	Other types	34	2.751±1.712	
Histologic grade	G1-2	103	3.366±1.856	0.1624
	G3	68	2.829±1.999	
	GX [‡]	23	2.912±1.620	
Clinical stage	I-II	153	3.190±1.908	0.3477
	III-IV	41	2.877±1.828	
Pathological T stage	T1-2	138	3.197±1.800	0.6903
	T3-4	21	2.877±2.160	
	TX [‡]	35	2.987±2.101	
Pathological N stage	N0	86	3.082±1.672	0.9546
	N1	35	3.124±2.004	
	NX [‡]	73	3.174±2.093	
Recurrence	No	169	3.003±1.809	0.0195*
	Yes	25	3.946±2.242	

[†]FEZF1 expression: normalized $\log_2(x+1)$ transformed RSEM value.

[‡]GX, TX and NX: samples with unknown histological grade, tumor or node stage.

Student's t-test or ANOVA, * $P < 0.05$, ** $P < 0.01$.

Table S3. Correlation between FEZF1 level and clinicopathological characteristics of the CESC patients from TCGA

Characteristics	N	FEZF1		P	
		High	Low		
Age	<50	115	23	92	0.0974
	≥50	79	24	55	
Histologic type	Squamous cell	160	40	120	0.5856
	Other types	34	7	27	
Histologic grade	G1-2	103	27	76	0.4044
	G3	68	17	51	
	GX [†]	23	3	20	
Clinical stage	I-II	153	37	116	0.9781
	III-IV	41	10	31	
Pathological T stage	T1-2	138	33	105	0.8785
	T3-4	21	6	15	
	TX [†]	35	8	27	
Pathological N stage	N0	86	18	68	0.6215
	N1	35	9	26	
	NX [†]	73	20	53	
Recurrence	No	169	35	134	0.0030**
	Yes	25	12	13	

[†]GX, TX and NX: samples with unknown histological grade, tumor or node stage.

Chi-square test, * $P < 0.05$, ** $P < 0.01$.

Table S4. Multivariate Cox proportional hazards regression analysis of the OS when recurrence is included

Characteristics	N	OS		
		HR (95% CI)	<i>P</i>	
Clinical stage	I-II	153	1	0.317
	III-IV	41	1.473(0.690-3.144)	
Pathological T stage	T1-2	138	1	0.031*
	T3-4	21	2.947(1.105-7.859)	
	TX [†]	35	1.746(0.617-4.944)	
Pathological N stage	N0	86	1	0.014*
	N1	35	3.576(1.299-9.849)	
	NX [†]	73	2.518(0.820-7.734)	
FEZF1	Low	147	1	0.411
	High	47	1.345(0.663-2.727)	
Recurrence	No	169	1	<0.001**
	Yes	25	4.315(2.176-8.555)	

Abbreviations: HR = hazard ratio; 95% CI = 95% confidence interval.

[†]TX and NX: samples with unknown pathological tumor or node stage.

P* < 0.05, *P* < 0.01.

Figure Legend

Figure S1. Kaplan-Meier analysis of the overall survival (OS) and recurrence-free survival (RFS) of patients with eight most common cancer types using data from TCGA. FEZF1 expression significantly associated with the OS of CESC, ESCA and LUNG patients, as well as the RFS of CESC and PRAD patients, but no significant association was observed in the other cancer types. BRCA, breast cancer; CESC, cervical cancer; COADREAD, colon and rectal cancer; ESCA, esophageal cancer; LIHC, liver cancer; LUNG, lung cancer; PRAD, prostate cancer; STAD, stomach cancer.

Figure

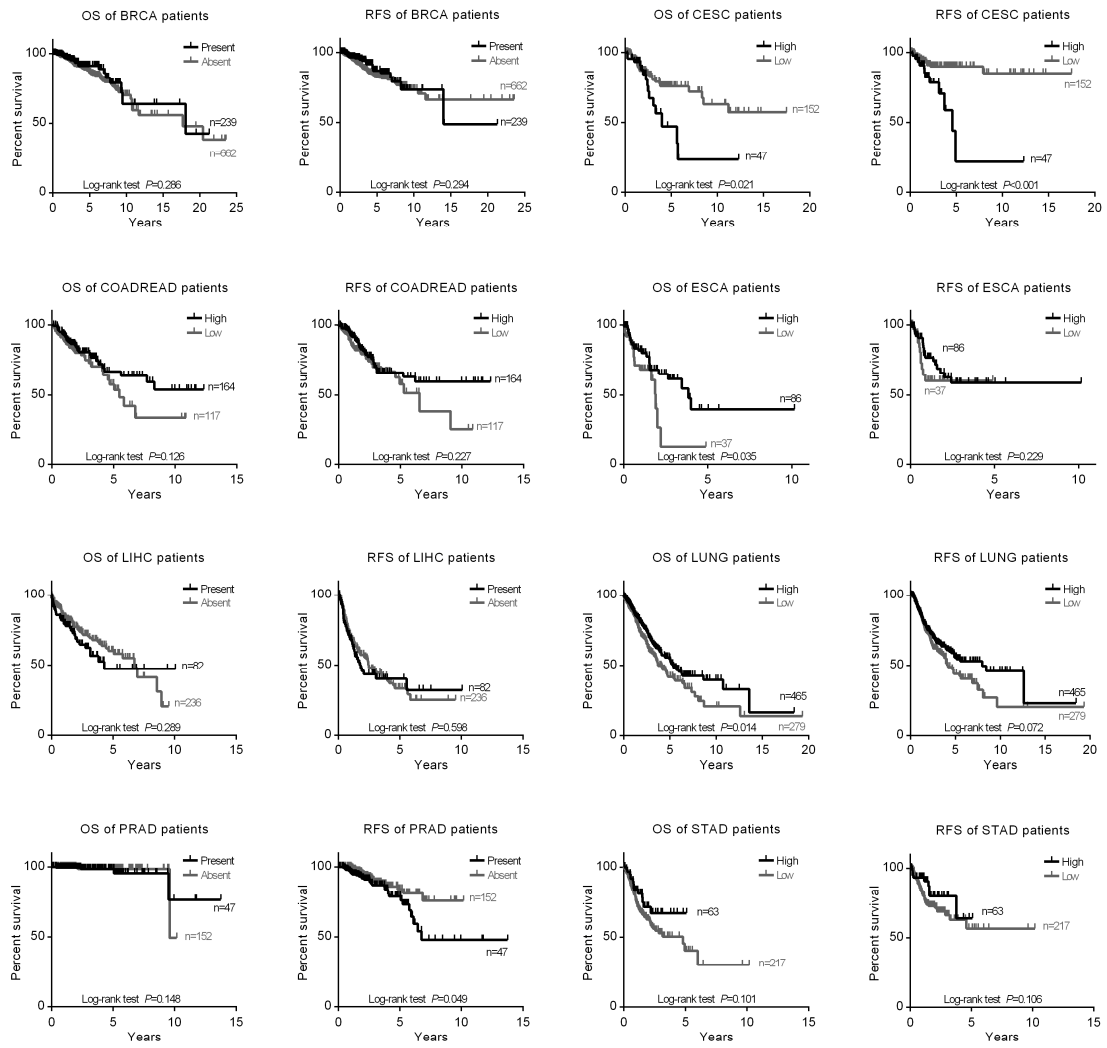


Figure S1