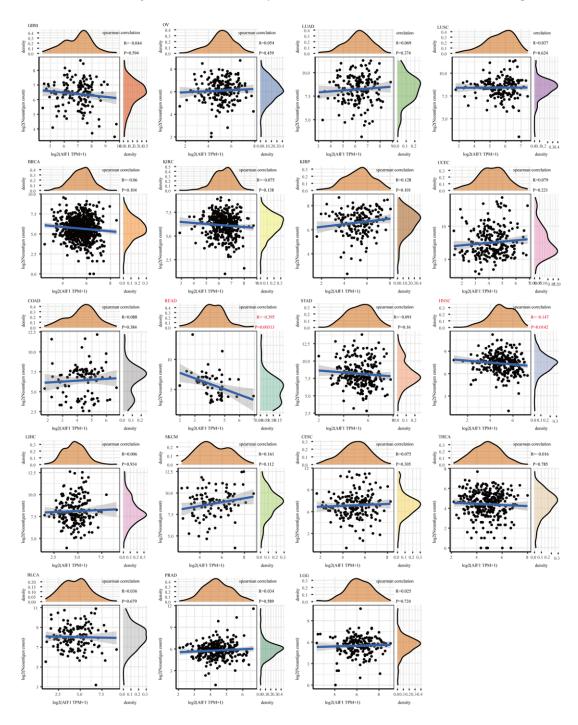
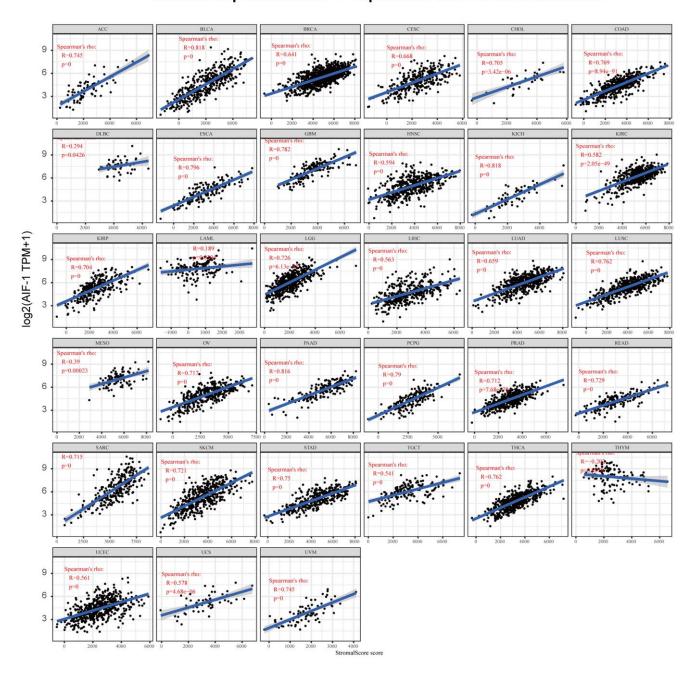
SUPPLEMENTARY FIGURES

Correlation analysis between AIF-1 expression and the number of tumors neoantigens



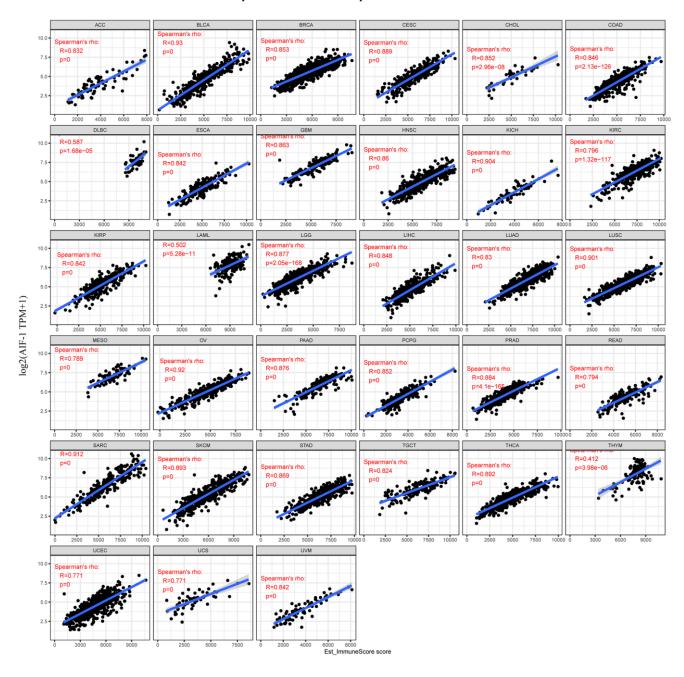
Supplementary Figure 1. Correlation analysis between AIF-1 expression across cancers and the number of tumors neoantigens.

Relationship between AIF-1 expression and the StromalScores.



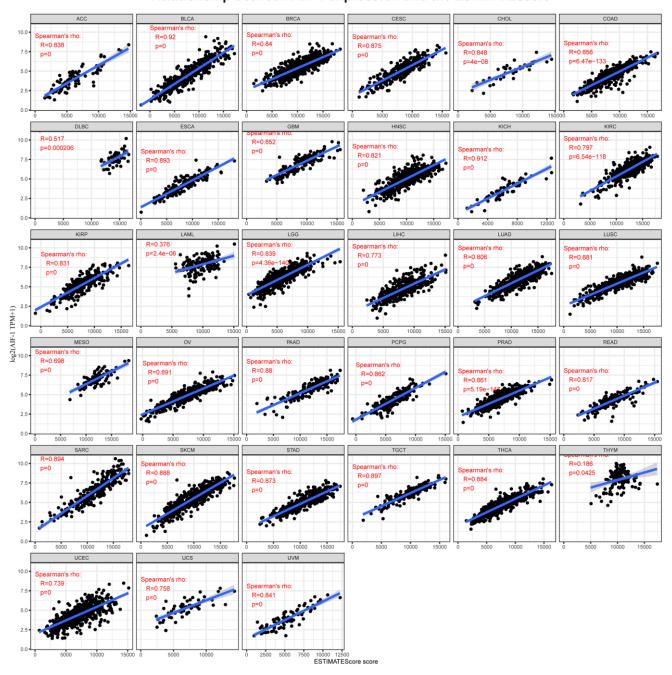
Supplementary Figure 2. Correlation analysis between the expression levels of AIF-1 and the StromalScore across cancers.

Relationship between AIF-1 expression and the ImmuneScores



Supplementary Figure 3. Correlation analysis between the expression levels of AIF-1 and the ImmuneScore across cancers.

Relationship between AIF-1 expression and the ESTIMATEScore



Supplementary Figure 4. Correlation analysis between the expression levels of AIF-1 and EstimateScore across cancers.

A Univariate Cox regression of AIF-1 in SKCM (OS)

Characteristics	Total(N)	HR(95% CI) Univariate analysis		P value Univariate analysis
T stage	361		i	
T1	41	Reference	:	
T2	77	1.495 (0.811-2.756)	*	0.197
T3	90	2.097 (1.158-3.798)		0.015
T4	153	3.711 (2.070-6.653)	!	<0.001
N stage	402		;	
N0	224	Reference	:	
N1	73	1.497 (1.014-2.210)	•••	0.043
N2	49	1.534 (0.972-2.419)	→	0.066
N3	56	2.731 (1.769-4.215)	!	<0.001
M stage	430		;	
MO	406	Reference	:	
M1	24	1.897 (1.029-3.496)	-	0.04
Age	456		-	
<=60	246	Reference	1	
>60	210	1.656 (1.251-2.192)	He-H	< 0.001
Gender	456		:	
Female	172	Reference	i	
Male	284	1.172 (0.879-1.563)	ķ ∙	0.281
Pathologic stage	410		!	
Stage I	77	Reference	;	
Stage II	140	1.586 (1.054-2.385)	}• →	0.027
Stage III	170	1.983 (1.344-2.927)	i⊷⊶	<0.001
Stage IV	23	3.517 (1.781-6.944)	¦ ——	< 0.001
AIF1	456		!	
Low	227	Reference	;	
High	229	0.539 (0.411-0.707)	•!	<0.001

B Multivariate Cox regression of AIF-1 in SKCM (OS)

Characteristics	Total(N)	HR(95% CI) Multivariate analysis		P value Multivariate analysis
T stage	361		i	
T1	41		-	
T2	77	1.677 (0.844-3.333)	•••	0.14
T3	90	2.900 (1.206-6.969)		0.017
T4	153	5.773 (2.419-13.780)	! ⊷	<0.001
N stage	402		;	
N0	224		!	
N1	73	2.883 (0.983-8.456)	·	0.054
N2	49	2.652 (0.877-8.019)		0.084
N3	56	7.464 (2.484-22.427)	·	<0.001
M stage	430		;	
MO	406		:	
M1	24	0.812 (0.208-3.177)	·•	0.765
Age	456		-	
<=60	246			
>60	210	1.191 (0.849-1.672)	in the second	0.311
Gender	456		!	
Female	172		i	
Male	284		-	
Pathologic stage	410			
Stage I	77		;	
Stage II	140	0.590 (0.283-1.232)	•	0.16
Stage III	170	0.352 (0.106-1.172)	••	0.089
Stage IV	23		-	
AIF1	456		į	
Low	227		1	
High	229	0.566 (0.406-0.788)	•!	< 0.001

C Univariate Cox regression of AIF-1 in UVM (OS)

Characteristics	Total(N)	HR(95% CI) Univariate analysis		P value Univariate analysis
Pathologic T stage	80		i	
T2	14	Reference	!	
T3	32	3.138 (0.401-24.558)	—	0.276
T4	34	4.572 (0.590-35.428)	<u>•</u>	0.146
Pathologic N stage	79		i	
N0	52	Reference	-	
NX	27	0.890 (0.360-2.198)	•	0.8
Pathologic M stage	78		-	
MO	51	Reference	1	
M1	4	54.348 (5.517-535.347)	├	< 0.001
MX	23	0.521 (0.171-1.587)	•	0.252
Clinical stage	80		i	
Stage II	36	Reference	!	
Stage III	40	1.400 (0.556-3.525)		0.476
Stage IV	4	79.342 (7.546-834.274)		<0.001
Gender	80		i	
Female	35	Reference	-	
Male	45	1.542 (0.651-3.652)	•	0.325
Age	80		-	
<=60	40	Reference	!	
>60	40	2.123 (0.914-4.933)	ė .	0.08
Histological type	80		!	
Epithelioid Cell	13	Reference	i	
Spindle Cell	30	0.107 (0.025-0.452)	•	0.002
Mix	37	0.438 (0.157-1.218)	•	0.113
AIF1	80		1	
Low	40	Reference	į	
High	40	6.744 (2.424-18.766)	• →	< 0.001

D Multivariate Cox regression of AIF-1 in UVM (OS)

Characteristics	Total(N)	HR(95% CI) Multivariate analysis		P value Multivariate analysis
Pathologic M stage	78		1	
MO	51			
M1	4	34.856 (2.822-430.508)	ļ	0.006
MX	23	0.175 (0.041-0.756)	•	0.02
Clinical stage	80			
Stage II	36			
Stage III	40	1.308 (0.424-4.036)	ψı	0.641
Stage IV	4			
Histological type	80		-	
Epithelioid Cell	13		-	
Spindle Cell	30	0.140 (0.026-0.768)	4	0.024
Mix	37	0.735 (0.234-2.309)	•	0.598
AIF1	80			
Low	40		-	
High	40	9.577 (2.600-35.273)	i———	<0.001

Supplementary Figure 5. Prognostic value of AIF-1 expression. (A) Univariate Cox regression of AIF-1 in SKCM (OS). (B) Multivariate Cox regression of AIF-1 in SKCM (OS). (C) Univariate Cox regression of AIF-1 in UVM (OS). (D) Multivariate Cox regression of AIF-1 in UVM (OS).