

Interleukin-11/IL-11 Receptor Promotes Glioblastoma Cell Proliferation, EMT and Invasion

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Table S1. Proteins differentially expressed in IL-11R α transfected cells.

		20-IL-11R α		28-IL-11R α			
	PROTEIN NAME	FOLD CHANGE	-LOG (P-VALUE)	FOLD CHANGE	-LOG (P-VALUE)	Proliferation	Migration/Invasion
#1	RAP1B	3.34	2.94	0.69	2.72	✓	✓
#2	KYAT3	3.30	3.17	1.30	1.51		
#3	ENO3	3.11	1.96	2.17	2.73		
#4	ENO2	2.99	2.81	1.71	2.67	✓	✓
#5	WDR46	2.96	1.54	3.10	1.39	✓	
#6	NGFR	2.77	2.09	1.12	2.41		
#7	RFC1	2.70	1.64	1.48	1.58	✓	✓
#8	ALB	2.67	2.39	2.52	2.22		
#9	ASS1	2.66	2.84	2.77	5.12		
#10	ITGA7	2.44	2.48	1.02	1.78	✓	✓
#11	KYAT1	2.43	1.59	1.26	2.43		
#12	AQP1	2.23	1.46	0.79	2.48		✓
#13	FLNC	2.06	1.87	2.60	5.31		✓
#14	PTGR2	1.95	3.21	1.47	1.82		
#15	DUOX2	1.91	2.13	1.36	2.84		✓
#16	PDZRN3	1.86	1.83	2.31	2.56		✓
#17	CPPED1	1.86	1.69	2.19	1.62		
#18	MCEE	1.82	1.69	1.61	1.53		
#19	LPCAT2	1.79	2.30	3.52	2.58	✓	
#20	GALK2	1.77	2.08	1.07	2.28		
#21	LRP1	1.77	1.79	1.49	2.13		✓
#22	SPARC	1.76	2.03	1.30	2.07	✓	✓
#23	ARL6IP5	1.76	1.97	0.86	1.88		

#24	AKR1B1	1.73	1.81	0.94	2.40	✓	✓
#25	SELENBP1	1.63	2.44	3.05	1.95		
#26	DNAL1	1.60	1.77	1.20	1.77		✓
#27	HSPA1L	1.57	2.27	1.61	1.62		✓
#28	CKMT1A	1.57	1.72	1.14	1.80		
#29	METTL7A	1.53	4.74	1.20	4.41		
#30	RAB5B	1.51	2.00	1.01	1.73		✓
#31	TRNT1	1.51	1.95	0.70	2.63		
#32	SARDH	1.44	1.58	1.49	2.24		
#33	NUDCD2	1.41	1.82	1.12	4.14		✓
#34	PGK1	1.36	1.64	0.84	1.94	✓	
#35	BGN	1.35	1.75	1.45	1.90	✓	✓
#36	TNC	1.29	2.08	0.98	2.36	✓	✓
#37	HSPG2	1.22	2.02	1.29	2.86		✓
#38	SELENOF	1.17	2.63	0.92	3.11		
#39	MSRB3	1.16	1.49	1.97	2.05		
#40	FAM118A	1.15	1.65	1.33	1.58		✓
#41	RSU1	1.13	1.91	0.72	3.39		✓
#42	DIABLO	1.01	1.64	1.57	2.09		
#43	ABCB11	0.98	2.56	1.21	1.60		
#44	ANXA6	0.98	1.55	1.45	3.44		
#45	NXN	0.94	2.61	2.14	2.65	✓	
#46	CKB	0.93	3.01	1.90	3.13		✓
#47	ACADL	0.92	1.63	1.63	2.47		
#48	SEPTIN9	0.79	1.89	0.52	3.70	✓	✓
#49	CYRIB	0.77	2.69	0.48	2.82		✓
#50	PLCD1	0.76	1.81	2.30	2.00	✓	
#51	UBA2	0.69	1.85	0.53	2.99	✓	
#52	ECHDC1	0.61	2.78	1.09	2.03	✓	
#53	AKR7A2	0.53	2.80	0.61	2.65		
#54	RECQL	-0.65	2.67	-1.53	3.06		
#55	TIMP3	-0.66	1.80	-3.37	4.51		✓
#56	SRP68	-0.71	2.28	-0.66	2.68	✓	
#57	AP1M1	-0.77	2.25	-1.15	2.80	✓	
#58	XRN2	-0.86	1.98	-0.65	2.56		
#59	ESYT1	-0.87	2.82	-2.06	3.03		
#60	PARP1	-0.93	3.12	-1.60	4.04	✓	✓
#61	VAC14	-0.94	2.79	-0.68	1.93		
#62	MPDU1	-0.98	1.75	-2.80	2.55		✓
#63	ELOVL5	-1.00	1.54	-1.42	2.16	✓	✓
#64	LARS1	-1.01	2.06	-1.00	2.22	✓	✓
#65	AP1G1	-1.03	1.74	-1.08	1.77	✓	✓

#66	HNRNPU	-1.09	2.39	-0.78	2.56	✓	
#67	SRP72	-1.12	3.01	-0.72	3.18		
#68	RPL15	-1.12	1.65	-1.21	1.86	✓	
#69	TNPO3	-1.20	1.70	-0.60	2.47		✓
#70	UBE2C	-1.22	1.65	-0.88	2.05	✓	✓
#71	EPS8	-1.22	1.48	-1.12	1.67	✓	✓
#72	RNPEP	-1.41	1.63	-0.90	1.66		
#73	USP10	-1.49	2.90	-1.04	3.50	✓	
#74	IARS1	-1.49	3.10	-0.75	1.79	✓	✓
#75	KIF13A	-1.52	1.55	-0.83	2.05		✓
#76	DIAPH1	-1.53	3.44	-0.59	2.14		
#77	MATR3	-1.56	1.91	-0.95	2.15	✓	
#78	RPL18A	-2.01	2.30	-0.89	1.87	✓	
#79	OSBPL10	-2.01	2.38	-1.42	2.09		
#80	CHD4	-2.12	2.71	-1.14	2.17	✓	✓
#81	ALDH1A3	-2.19	2.13	-0.90	2.81	✓	

Note: ticks/checks for proliferation and/or migration indicate that there is published data supporting this protein in playing a role in either proliferation or migration respectively.

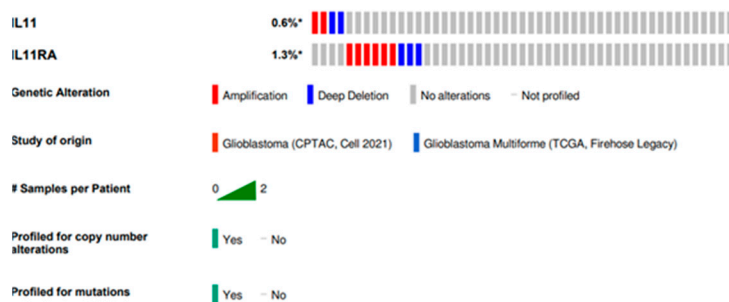


Figure S1. The Alteration Rate of IL-11 and IL-11R α in Glioblastoma is Low. The cBioPortal was used to determine the alterations of IL-11 and IL-11Ra, including the correlative rate and alternation types.

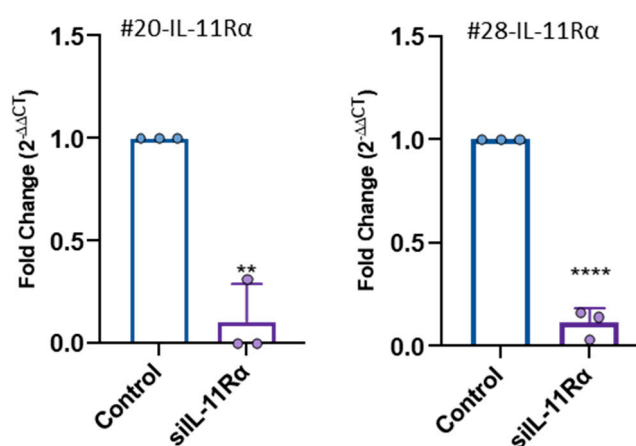


Figure S2. #20-IL-11R α and #28-IL-11R α cells were transfected with control or IL-11R α siRNA and allowed to adhere overnight. qPCR was then conducted on **A.** #20-IL-11R α and **B.** #28-IL-11R α cells to determine the gene expression of IL-11R α . The results have been converted to $2^{-\Delta\Delta CT}$ to determine the relative fold change, in which the parental cell line was given a fold change of 1.