

**Table S1. Parameters of multiple regression models for signaling pathway analysis.**

TF	Variable	Coefficient	Standard Error	t-value	Adjusted p-value
AP1	R <sup>2</sup> =0.3942				
	10A.ErbB2	-4.79E-03	4.14E-03	-1.16E+00	2.69E-01
	231	-3.75E-02	4.21E-03	-8.91E+00	5.56E-16
	RGD	-1.82E-02	5.57E-03	-3.26E+00	1.81E-03
	YIGSR	-2.98E-05	5.49E-03	-5.42E-03	9.96E-01
	Time	9.06E-03	1.81E-03	5.00E+00	2.51E-06
	Time <sup>2</sup>	-9.16E-04	1.58E-04	-5.79E+00	6.22E-08
	10A.ErbB2:RGD	2.34E-02	7.34E-03	3.19E+00	2.21E-03
	231:RGD	2.47E-02	7.34E-03	3.37E+00	1.34E-03
	YIGSR:Time	2.47E-03	8.89E-04	2.78E+00	7.36E-03
CREB	R <sup>2</sup> =0.3054				
	10A.ErbB2	1.43E-02	3.17E-03	4.52E+00	1.92E-05
	231	2.02E-02	4.55E-03	4.44E+00	2.55E-05
	RGD	-7.57E-03	3.16E-03	-2.40E+00	2.03E-02
	YIGSR	4.08E-03	3.14E-03	1.30E+00	2.17E-01
	Time	6.98E-03	1.41E-03	4.95E+00	2.84E-06
	Time <sup>2</sup>	-4.86E-04	1.23E-04	-3.95E+00	1.68E-04
	10A.ErbB2:YIGSR	-2.05E-02	5.01E-03	-4.09E+00	1.01E-04
	231:RGD	2.55E-02	4.97E-03	5.14E+00	1.29E-06
	231:Time	-5.95E-03	6.79E-04	-8.76E+00	9.34E-16
STAT1	R <sup>2</sup> =0.5961				
	10A.ErbB2	2.53E-02	6.55E-03	3.86E+00	2.29E-04
	231	2.34E-02	7.78E-03	3.01E+00	3.79E-03
	RGD	1.23E-02	4.58E-03	2.68E+00	9.38E-03
	YIGSR	-2.56E-02	4.52E-03	-5.67E+00	1.09E-07
	Time	4.27E-04	8.19E-04	5.22E-01	6.35E-01
	231:RGD	4.58E-02	7.71E-03	5.94E+00	3.18E-08
	231:YIGSR	4.48E-02	7.72E-03	5.81E+00	6.09E-08
	10A.ErbB2:Time	3.44E-03	1.15E-03	2.99E+00	3.98E-03
	231:Time	-8.46E-03	1.11E-03	-7.60E+00	2.44E-12
STAT3	R <sup>2</sup> =0.4556				
	10A.ErbB2	-1.33E-02	7.11E-03	-1.87E+00	7.14E-02
	231	4.68E-02	7.00E-03	6.69E+00	4.81E-10
	RGD	-2.36E-02	5.56E-03	-4.24E+00	5.88E-05
	Time	1.37E-04	8.15E-04	1.68E-01	8.89E-01
	10A.ErbB2:RGD	4.49E-02	7.99E-03	5.62E+00	1.19E-07
	231:RGD	5.75E-02	7.79E-03	7.37E+00	7.82E-12
	10A.ErbB2:Time	3.84E-03	1.16E-03	3.31E+00	1.56E-03
	231:Time	-4.47E-03	1.11E-03	-4.01E+00	1.37E-04