

Upstream regulator	Function	Baseline (Old vs Young)		Young		Old			
		z-score	p-value	z-score	p-value	z-score	p-value		
IFNL1	Cytokine	↑	2.630	4.94E-03	-	-1.929	2.25E-03	-	-
IFNA2	Cytokine	↑	3.272	1.68E-04	↓	-3.138	1.08E-03	-	-
IFNG	Cytokine	↑	2.934	1.85E-05	↓	-2.052	1.40E-02	-	0.792 3.48E-02
EIF2AK2	Kinase	-	-	-	↓	-2.828	1.10E-02	-	-
MAPK1	Kinase	↓	-2.985	1.12E-01	↑	3.63	1.19E-02	-	-
GAPDH	Enzyme	-	-	-	↑	2.433	6.81E-03	-	-
TGM2	Enzyme	-	0.112	1.11E+00	↓	-4.375	1.23E-03	-	-
PDGF BB	Complex	-	-	-	-	-	-	↓	-4.026 5.16E-09
ERK	Group	-	-	-	-	-	-	↓	-3.538 7.29E-04
CCL5	Cytokine	-	-	-	-	-	-	↓	-2.985 6.15E-04
Jnk	Group	-	-	-	-	-	-	↓	-2.960 3.71E-03
F7	Peptidase	-	-	-	-	-	-	↓	-2.772 9.95E-05
CSF2	Cytokine	-	-	-	-	-	-	↓	-2.722 3.14E-04
STAT3	Transcription regulator	-	-	-	-	-	-	↓	-2.598 1.19E-04
ERK1/2	Group	-	-	-	-	-	-	↓	-2.256 2.79E-03
TNF	Cytokine	-	0.870	8.23E-03	-	-1.993	0.261	↓	-2.219 5.28E-03
P38 MAPK	Group	-	-	-	-	-	-	↓	-2.131 1.21E-02
EGF	Growth factor	-	-	-	-	-	-	↓	-2.072 1.53E-02
IL1	Group	-	-	-	-	-	-	↓	-2.000 1.33E-02
COL18A1	Other	-	-	-	-	-	-	↑	3.000 1.70E-02
CD24	Other	-	-	-	↑	2.236	6.20E-02	↑	2.121 6.39E-03
TAB1	Enzyme	-	-	4.05E-02	-	-	-	↑	2.000 4.02E-02

↑: activated; ↓: inhibited; -: not activated/inhibited;

Black text: regulator is present in dataset and z-score is below -2 or above 2 with p-value<0.05

Grey text: regulator is present in dataset, but z-score is above -2 or below 2, or P-value is>0.05