

Supplemental Table 30. The 20 most relevant pathways sorted by p-value for RFA intervention.

Top-level pathway	Pathway name	Reactome Entities				Reactions		Gene
		found	ratio	p-value	FDR*	found	ratio	
Immune System	Regulation of Complement cascade	3 / 231	0.012	3.58e-04	0.017	17 / 42	0.003	C4A, SERPING1
Immune System	Activation of C3 and C5	2 / 45	0.002	3.61e-04	0.017	3 / 4	2.69e-04	C4A
Immune System	Complement cascade	3 / 240	0.013	4.01e-04	0.017	23 / 72	0.005	C4A, SERPING1
Disease	Defective SERPING1 causes hereditary angioedema	1 / 3	1.57e-04	0.002	0.05	3 / 3	2.02e-04	SERPING1
Metabolism of proteins	Post-translational protein phosphorylation	2 / 107	0.006	0.002	0.05	1 / 1	6.72e-05	C4A, FGA
Hemostasis	Formation of Fibrin Clot (Clotting Cascade)	2 / 135	0.007	0.003	0.059	7 / 61	0.004	FGA, SERPING1
Immune System	Initial triggering of complement	2 / 138	0.007	0.003	0.059	3 / 21	0.001	C4A
Hemostasis	Platelet degranulation	2 / 177	0.009	0.005	0.08	1 / 11	7.39e-04	FGA, SERPING1
Hemostasis	Response to elevated platelet cytosolic Ca ²⁺	2 / 232	0.012	0.009	0.115	1 / 14	9.40e-04	FGA, SERPING1
Disease	Regulation of Insulin-like Growth Factor (IGF) transport and uptake by Insulin-like Growth Factor Binding Proteins (IGFBPs)	2 / 254	0.013	0.011	0.115	1 / 14	9.40e-04	C4A, FGA
Metabolism of RNA	mRNA decay by 3' to 5' exoribonuclease	1 / 19	9.95e-04	0.012	0.115	1 / 3	2.02e-04	EXOSC3
Disease	Defects of contact activation system (CAS) and kallikrein/kinin system (KKS)	1 / 20	0.001	0.012	0.115	3 / 18	0.001	SERPING1
Transport of small molecule	HDL assembly	1 / 21	0.001	0.013	0.115	3 / 9	6.05e-04	FGA
Transport of small molecule	HDL clearance	1 / 23	0.001	0.014	0.115	1 / 5	3.36e-04	FGA

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Disease	Diseases of hemostasis	1 / 23	0.001	0.014	0.115	3 / 23	0.002	SERPING1
Singal Transduction	IRAK4 deficiency (TLR2/4)	1 / 29	0.002	0.018	0.122	2 / 2	1.34e-04	FGA
Singal Transduction	GRB2:SOS provides linkage to MAPK signaling for Integrins	1 / 36	0.002	0.022	0.122	2 / 2	1.34e-04	FGA
Disease	Signaling by high-kinase activity BRAF mutants	1 / 37	0.002	0.023	0.122	4 / 6	4.03e-04	FGA
Disease	MyD88 deficiency (TLR2/4)	1 / 39	0.002	0.024	0.122	2 / 2	1.34e-04	FGA
Singal Transduction	MAP2K and MAPK activation	1 / 41	0.002	0.025	0.122	8 / 12	8.06e-04	FGA