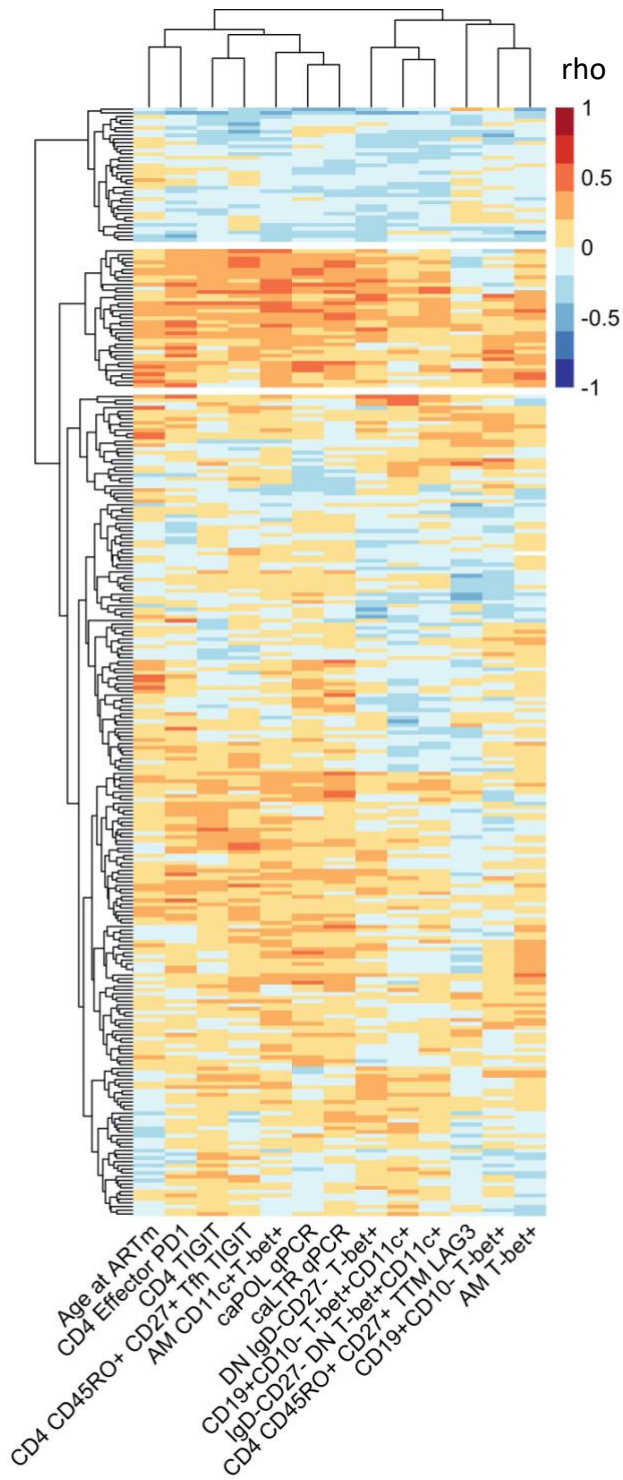


Supplementary Fig.1



Supplementary Table 1

P values	CD19+CD10- T- bet+CD11c+	IgD-CD27- DN T- bet+CD11c+	AM CD11c+T- bet+	DN IgD-CD27- T-bet+	DN IgD-CD27- T-bet expr	AM T-bet exp	IgD- CD27-
CD4 CD45RO+ CD27+ TTM LAG3	0.461785565	0.004998415	0.0109684	0.277308488	0.021389135	0.1921706 69	0.1867714 85
CD4 CD69 CD4 CD45RO+ CD27+ TTM PDL1	0.919705883 0.743632288	0.046704979 0.032254947	0.01265367 0.022989327	0.50690658 0.466388794	0.187838184 0.08269117	0.2110465 0.1691959 72	0.9432487 9 0.0988059 57
CD4 TEM PDL1 CD4 CD45RO+ CD27+ Tfh PD1 CD4 Effector CD38- HLA-DR-	0.223082784 0.064706569 0.062731004	0.04300951 0.302856523 0.00775711	0.020614009 0.049687336 0.090184541	0.156102816 0.477797321 0.001422804	0.223748423 0.142906932 0.011897081	0.4078661 0.2330341 57 0.0792231 42	0.0999665 72 0.1527986 1 0.0338165 08
CD4 Effector	0.023755404	0.002439781	0.0395915	0.002754557	0.007045795	0.0597532 48	0.0092922 35
CD4 TIGIT CD4 CD45RO+ CD27+ Tfh TIGIT	0.002732047 0.007941634	0.000279364 0.023878661	0.002070491 0.015329827	0.006341559 0.016272815	0.006323544 0.058745236	0.0077684 73 0.0316694 57	0.0089859 75 0.1227698 08
CD4 Effector PD1	0.065957926	0.039291289	0.006647288	0.000281472	0.040581401	0.0123648 55	0.0487804 52
rho	CD19+CD10- T- bet+CD11c+	IgD-CD27- DN T- bet+CD11c+	AM CD11c+T- bet+	DN IgD-CD27- T-bet+	DN IgD-CD27- T-bet expr	AM T-bet exp	IgD- CD27-
CD4 CD45RO+ CD27+ TTM LAG3	NS	0.457746034	0.41902678	NS	0.382301836	NS	NS
CD4 CD69 CD4 CD45RO+ CD27+ TTM PDL1	NS NS	0.343494538 0.357597999	0.423135697 0.378089601	NS NS	NS NS	NS NS	NS NS

CD4 TEM PDL1	NS	0.339168493	0.384437151	NS	NS	NS	NS
CD4 CD45RO+ CD27+							
Tfh PD1	NS	NS	0.329535947	NS	NS	NS	NS
CD4 Effector CD38-							0.3546373
HLA-DR-	NS	0.436635137	NS	0.511716235	0.414761426	NS	24
							0.4275693
CD4 Effector	0.376158602	0.489606797	0.344574591	0.484423279	0.441367838	NS	43
						0.4365626	0.4292701
CD4 TIGIT	0.484776313	0.570601112	0.496492245	0.446475701	0.44661263	01	8
CD4 CD45RO+ CD27+						0.3587383	
Tfh TIGIT	0.435468298	0.375852751	0.401107036	0.397811394	NS	34	NS
						0.4127188	0.3307806
CD4 Effector PD1	NS	0.345067251	0.444201313	0.570352734	0.342971273	5	17

Supplementary Table 2

Reactome pathways - Performed on Negatively correlated proteins

Term	Adjusted.P.value	Proteins
Platelet degranulation Homo sapiens R-HSA-114608	6.88744E-08	ITIH4, APOH, ITGA2B, SERPINF2, ALB, HRG, TLN1
Response to elevated platelet cytosolic Ca ²⁺ Homo sapiens R-HSA-76005	6.88744E-08	ITIH4, APOH, ITGA2B, SERPINF2, ALB, HRG, TLN1
Hemostasis Homo sapiens R-HSA-109582	1.57513E-06	ITIH4, APOH, ITGA2B, SERPINF2, ALB, HBB, HBD, HRG, TLN1, KLKB1
Platelet activation, signaling and aggregation Homo sapiens R-HSA-76002	8.94125E-06	ITIH4, APOH, ITGA2B, SERPINF2, ALB, HRG, TLN1
Erythrocytes take up oxygen and release carbon dioxide Homo sapiens R-HSA-1247673	8.94125E-06	CA1, HBB, HBA1
Erythrocytes take up carbon dioxide and release oxygen Homo sapiens R-HSA-1237044	2.49667E-05	CA1, HBB, HBA1
O ₂ /CO ₂ exchange in erythrocytes Homo sapiens R-HSA-1480926	2.49667E-05	CA1, HBB, HBA1
Scavenging of heme from plasma Homo sapiens R-HSA-2168880	2.56245E-05	AMBP, ALB, HBB, HBA1
Binding and Uptake of Ligands by Scavenger Receptors Homo sapiens R-HSA-2173782	0.000154953	AMBP, ALB, HBB, HBA1
Dissolution of Fibrin Clot Homo sapiens R-HSA-75205	0.003639893	SERPINF2, HRG

Reactome pathways - Performed on Positively correlated proteins

Term	Adjusted.P.value	Proteins
Complement cascade Homo sapiens R-HSA-166658	1.6472E-12	IGLV4-69, C5, CFI, IGLV2-23, C4BPA, IGLC2, CLU, CFB, IGLV10-54
Scavenging of heme from plasma Homo sapiens R-HSA-2168880	1.02257E-08	IGLV4-69, IGLV2-23, HPR, IGLC2, APOL1, IGLV10-54
Binding and Uptake of Ligands by Scavenger Receptors Homo sapiens R-HSA-2173782	1.29901E-07	IGLV4-69, IGLV2-23, HPR, IGLC2, APOL1, IGLV10-54
Initial triggering of complement Homo sapiens R-HSA-166663	1.53583E-06	IGLV4-69, IGLV2-23, IGLC2, CFB, IGLV10-54
Regulation of Complement cascade Homo sapiens R-HSA-977606	2.53246E-06	C5, CFI, C4BPA, CFB
Classical antibody-mediated complement activation Homo sapiens R-HSA-173623	1.70347E-05	IGLV4-69, IGLV2-23, IGLC2, IGLV10-54
FCGR activation Homo sapiens R-HSA-2029481	2.17615E-05	IGLV4-69, IGLV2-23, IGLC2, IGLV10-54
Creation of C4 and C2 activators Homo sapiens R-HSA-166786	2.17615E-05	IGLV4-69, IGLV2-23, IGLC2, IGLV10-54
Role of phospholipids in phagocytosis Homo sapiens R-HSA-2029485	4.38779E-05	IGLV4-69, IGLV2-23, IGLC2, IGLV10-54
FCERI mediated Ca ²⁺ mobilization Homo sapiens R-HSA-2871809	4.50569E-05	IGLV4-69, IGLV2-23, IGLC2, IGLV10-54

GO Biological Process - Performed on Negatively correlated proteins

Term	Adjusted.P.value	Proteins
platelet degranulation (GO:0002576)	1.58619E-08	ITIH4, APOH, ITGA2B, SERPINF2, ALB, TAGLN2, HRG, TLN1
regulated exocytosis (GO:0045055)	3.29263E-08	ITIH4, APOH, ITGA2B, SERPINF2, ALB, TAGLN2, HRG, TLN1
negative regulation of blood coagulation (GO:0030195)	5.44959E-07	VTN, APOH, SERPINF2, HRG, KLKB1
regulation of fibrinolysis (GO:0051917)	5.44959E-07	APOH, SERPINF2, HRG, KLKB1
negative regulation of fibrinolysis (GO:0051918)	3.11665E-05	APOH, SERPINF2, HRG
receptor-mediated endocytosis (GO:0006898)	5.70694E-05	AMBP, IGKV1-17, ALB, IGHV3-13, HBB, HBA1
hydrogen peroxide catabolic process (GO:0042744)	9.58743E-05	HBB, APOA4, HBA1
positive regulation of blood coagulation (GO:0030194)	0.000221947	APOH, SERPINF2, HRG
hydrogen peroxide metabolic process (GO:0042743)	0.000231815	HBB, APOA4, HBA1
endocytosis (GO:0006897)	0.000238417	AMBP, IGKV1-17, ALB, IGHV3-13, HBB, HBA1

GO Biological Process - Performed on Positively correlated proteins

Term	Adjusted.P.value	Proteins
regulation of acute inflammatory response (GO:0002673)	8.01976E-14	APCS, C5, IGLV1-47, CFI, IGHV4-34, IGLV2-23, CFHR5, C4BPA, IGHV3-48, CLU, CFB
regulation of protein activation cascade (GO:2000257)	6.35311E-13	C5, IGLV1-47, CFI, IGHV4-34, IGLV2-23, CFHR5, C4BPA, IGHV3-48, CLU, CFB
regulation of complement activation (GO:0030449)	6.35311E-13	C5, IGLV1-47, CFI, IGHV4-34, IGLV2-23, CFHR5, C4BPA, IGHV3-48, CLU, CFB
regulation of humoral immune response (GO:0002920)	6.35311E-13	C5, IGLV1-47, CFI, IGHV4-34, IGLV2-23, CFHR5, C4BPA, IGHV3-48, CLU, CFB
regulation of immune effector process (GO:0002697)	6.35311E-13	C5, IGLV1-47, CFI, IGHV4-34, IGLV2-23, CFHR5, C4BPA, IGHV3-48, CLU, CFB
regulation of protein processing (GO:0070613)	1.73448E-12	C5, IGLV1-47, CFI, IGHV4-34, IGLV2-23, CFHR5, C4BPA, IGHV3-48, CLU, CFB
complement activation, classical pathway (GO:0006958)	3.30081E-09	APCS, IGHV5-51, IGLV1-47, IGLL1, IGHV4-34, IGLV2-23, IGHV3-48, IGLC2
humoral immune response mediated by circulating immunoglobulin (GO:0002455)	3.30081E-09	APCS, IGHV5-51, IGLV1-47, IGLL1, IGHV4-34, IGLV2-23, IGHV3-48, IGLC2
receptor-mediated endocytosis (GO:0006898)	5.13899E-05	IGLV1-47, IGHV4-34, IGLV2-23, IGHV3-48, HPR, APOL1
plasma membrane invagination (GO:0099024)	5.13899E-05	IGHV5-51, GSN, IGLL1, IGHV3-48, IGLC2