Supplemental Information

Supplemental Table 1. List of genes from RNA-seq analysis of risk and non-risk neutrophils that are enriched for in the IFNγ gene module.

Gene	logFC	AveExpr	adj.P.Val	Nonrisk_zscore	Risk_zscore‡
GBP4	2.013236	6.431283	0.05553	-0.7315	0.877805
OAS3	3.587099	6.677753	0.245195	-0.68673	0.824071
DDX60	3.231271	5.020459	0.271077	-0.66933	0.803191
EPSTI1	2.955831	5.847093	0.274052	-0.63124	0.757491
USP18	3.833699	1.65579	0.306876	-0.63119	0.757427
OAS2	3.63527	5.670081	0.307169	-0.61513	0.738157
XAF1	2.222521	6.10037	0.272325	-0.61367	0.736399
RSAD2	2.225841	7.836573	0.306876	-0.61349	0.736188
APOL6	1.379741	7.768407	0.264624	-0.60664	0.72797
IFIH1	1.336156	7.04697	0.294457	-0.60643	0.727711
IFI44L	2.910193	5.57444	0.294457	-0.60402	0.724824
IL2RB	1.564585	4.766676	0.300031	-0.60226	0.722709
PARP14	1.269638	8.350371	0.282368	-0.59441	0.71329
IFIT3	0.849758	9.545758	0.282368	-0.58763	0.705158
IFIT2	0.583942	10.16949	0.328111	-0.57932	0.695184
ARID5B	1.912272	3.168872	0.272325	-0.57854	0.694251
STAT1	0.560874	9.447233	0.272325	-0.57156	0.685878
ST3GAL5	1.628793	1.746058	0.440201	-0.56921	0.683053
STAT4	1.712547	3.700189	0.351355	-0.56668	0.680016
IFI44	2.175649	5.679361	0.421191	-0.55509	0.666111
NOD1	1.377584	3.588565	0.388203	-0.5523	0.662755
ZBP1	1.191914	7.15255	0.335207	-0.55118	0.661416
IRF9	0.549232	7.034067	0.39832	-0.54979	0.659743
UBE2L6	0.553361	8.467125	0.283971	-0.54815	0.657786
LY6E	2.331731	5.954573	0.456386	-0.54565	0.654783
RNF213	0.943897	9.075008	0.272325	-0.5444	0.65328
RTP4	2.708668	1.849162	0.507846	-0.54292	0.651498
STAT2	1.367658	7.936125	0.300031	-0.54143	0.649713
GBP6	1.942865	2.882636	0.283971	-0.53904	0.646847
SAMD9L	1.512003	7.474267	0.306876	-0.5352	0.64224
PML	1.037412	7.244391	0.313291	-0.53241	0.638891
CMPK2	1.79115	6.799807	0.450646	-0.5208	0.624959
IFIT1	1.322048	8.144368	0.349541	-0.51767	0.621205
PSME2	0.706588	6.913117	0.282368	-0.50437	0.605248
HERC6	1.823905	4.818484	0.450646	-0.4943	0.593159
TRAFD1	0.545708	8.502473	0.421191	-0.49043	0.588511
ISG15	0.948281	7.322094	0.411742	-0.48998	0.587972
ADAR	0.461776	10.26562	0.354344	-0.48694	0.584332
EIF2AK2	1.03032	7.578334	0.427401	-0.48463	0.581551

CCL5	1.131611	5.283778	0.508352	-0.48452	0.581422
MT2A	1.262428	4.744527	0.473242	-0.48412	0.580944
ST8SIA4	0.296386	8.933965	0.53671	-0.48283	0.579396
NLRC5	0.771212	8.296475	0.313291	-0.48269	0.579223
IRF5	1.48071	5.150419	0.413502	-0.48129	0.577546
PFKP	1.952134	2.591271	0.479347	-0.47074	0.564885
DDX58	1.203808	8.240826	0.402647	-0.46882	0.56258
TOR1B	0.801883	6.901423	0.456386	-0.46284	0.555409
BATF2	1.794193	3.865681	0.502651	-0.45449	0.545394
DHX58	2.387049	4.833682	0.401029	-0.4542	0.545041
IFI27	1.94554	-0.56129	0.512316	-0.4521	0.542522
FCGR1A	0.83211	4.05156	0.513466	-0.45163	0.541954
SERPING1	1.190671	6.694962	0.508352	-0.45023	0.540282
PNPT1	1.906069	4.246327	0.450167	-0.44848	0.538174
SELP	1.003706	3.117882	0.570449	-0.44751	0.537007
SAMHD1	1.393358	7.205688	0.421191	-0.44712	0.536541
GZMA	2.365169	3.695256	0.354344	-0.44678	0.536132
CD274	1.229719	5.010288	0.53163	-0.43736	0.524831
TRIM14	1.572064	4.480911	0.53671	-0.43663	0.523962
OASL	0.679545	8.236222	0.555387	-0.43656	0.523867
IFI35	1.058385	6.618874	0.460292	-0.43404	0.520853
IFITM2	0.084967	8.898138	0.854706	-0.43026	0.51631
TAP1	0.420583	9.318386	0.451478	-0.42642	0.511709
IRF7	0.704715	7.661971	0.508352	-0.42599	0.511182
SLAMF7	1.427128	3.689402	0.603905	-0.41158	0.49389
WARS	0.313709	8.641646	0.694031	-0.41118	0.493412
SOCS3	0.361157	9.020641	0.53163	-0.40162	0.481946
TDRD7	0.661513	6.781718	0.585039	-0.40093	0.481112
BST2	0.889017	6.023837	0.530098	-0.4002	0.480237
PARP12	0.974215	7.098405	0.575723	-0.39493	0.473912
MX1	1.048977	8.557206	0.508352	-0.39321	0.471855
NCOA3	0.195254	7.348471	0.76279	-0.38578	0.462938
VAMP5	0.425352	4.213622	0.73561	-0.37302	0.447628
LGALS3BP	1.321322	4.042552	0.608822	-0.36805	0.441662
IRF4	0.959358	0.088898	0.685127	-0.36062	0.432749
PLSCR1	0.518059	7.62291	0.664823	-0.35394	0.424729
SOCS1	0.998535	2.827166	0.692063	-0.33451	0.401416
PTGS2	0.405036	9.744097	0.607157	-0.33347	0.400165
TNFSF10	0.528891	8.606811	0.607157	-0.33289	0.399474
SLC25A28	0.566555	5.865915	0.504459	-0.32879	0.394546
RBCK1	0.35139	8.545606	0.582933	-0.32672	0.392061
PSMB9	0.188884	8.318175	0.708116	-0.32062	0.384743
SECTM1	0.189052	8.627032	0.690782	-0.32057	0.384679
IRF2	0.293859	8.582424	0.701986	-0.31833	0.381997

TRIM25	0.327004	8.288917	0.656835	-0.31549	0.378594
GCH1	0.721786	4.625302	0.726761	-0.31272	0.375262
LYSMD2	0.427556	7.125803	0.679434	-0.31103	0.373239
JAK2	0.204956	7.100221	0.815896	-0.30918	0.371019
TRIM21	0.524864	8.056428	0.666494	-0.30666	0.367995
IRF1	0.134823	9.620728	0.726785	-0.29669	0.356026
CXCL10	0.786415	-0.95916	0.73963	-0.29481	0.353777
TAPBP	0.089354	9.876757	0.793531	-0.28871	0.346456
RNF31	0.319326	6.361746	0.671708	-0.28429	0.341153
CASP1	0.288584	8.664707	0.779983	-0.28364	0.340366
MX2	0.234438	9.462204	0.713682	-0.2835	0.340203
LAP3	0.679869	6.40049	0.678851	-0.28067	0.336806
CFH	0.8037	0.597843	0.817818	-0.27721	0.332648
CSF2RB	0.090831	10.53729	0.869593	-0.27307	0.327683
MYD88	0.046913	9.98612	0.915806	-0.27011	0.324132
BPGM	0.146505	5.545033	0.901282	-0.26738	0.320854
SP110	0.154414	9.022897	0.772261	-0.2626	0.315124
FAS	0.074742	8.371347	0.902573	-0.26233	0.314791
P2RY14	0.389486	5.756006	0.813882	-0.26193	0.314319
CASP4	0.052132	9.015041	0.945426	-0.25542	0.306501
CD69	0.679887	6.174113	0.799173	-0.2501	0.300115
OGFR	0.15881	7.882181	0.78495	-0.24817	0.297805
FGL2	0.075686	9.42951	0.902045	-0.23665	0.283977
ARL4A	0.917619	2.629834	0.763195	-0.21167	0.254006
NMI	0.076745	8.06468	0.913481	-0.20974	0.251688
PSMB8	0.025222	8.607457	0.959466	-0.20315	0.243777
CMKLR1	0.591019	-0.35156	0.869485	-0.2028	0.243355
STAT3	-0.01542	10.07597	0.973155	-0.20011	0.240128
LCP2	0.082144	9.33375	0.92938	-0.19537	0.234443
PNP	-0.05607	3.078475	0.981794	-0.19496	0.233956
PLA2G4A	0.31029	2.875927	0.937014	-0.19106	0.229267
AUTS2	0.497186	1.054967	0.890439	-0.18899	0.226785
IL10RA	0.14441	7.728771	0.950805	-0.181	0.217205
PIM1	0.121889	7.826202	0.908403	-0.17883	0.214594
ZNFX1	0.023277	9.518983	0.962783	-0.1784	0.214085
CD86	0.592728	1.370016	0.830976	-0.17163	0.205951
ITGB7	0.375031	5.273959	0.850516	-0.17057	0.204687
VAMP8	0.324035	4.113129	0.891424	-0.1663	0.199561
IDO1	0.550852	4.918128	0.884541	-0.16348	0.196178
CD40	0.128794	0.200025	0.968475	-0.15971	0.191651
ISG20	-0.04727	8.409447	0.949639	-0.15674	0.188087
PDE4B	0.137838	9.531299	0.93083	-0.15627	0.187519
CASP7	0.49395	2.770872	0.826381	-0.15606	0.187268
PSMA3	-0.02572	6.71924	0.972998	-0.15242	0.182899

TNFAIP3	0.307462	8.14989	0.902992	-0.14966	0.179588
MVP	0.065026	9.216117	0.934376	-0.14615	0.175384
CD74	0.00264	8.920575	0.996275	-0.14613	0.175354
PSMA2	0.41532	3.193607	0.771568	-0.14581	0.174969
EIF4E3	-0.05888	8.287022	0.937014	-0.13798	0.165571
PSME1	-0.0312	8.859878	0.946203	-0.13069	0.156829
NAMPT	0.038736	10.44199	0.95769	-0.12931	0.155171
IFI30	0.168864	5.741799	0.926588	-0.12929	0.155152
PELI1	0.060189	9.691905	0.956914	-0.12886	0.154632
PTPN2	-0.08617	6.057639	0.928184	-0.12533	0.150392
RIPK2	-0.04668	7.371705	0.97093	-0.12508	0.150097
XCL1	-0.32578	-0.43807	0.931995	-0.12243	0.146916
CD38	-0.67816	1.692457	0.861261	-0.11262	0.135143
CIITA	0.349907	4.389019	0.895338	-0.10173	0.122073
TRIM26	0.020054	7.017271	0.987729	-0.09935	0.119218
IL15RA	-0.03303	3.443032	0.987817	-0.09741	0.116894
HIF1A	-0.07713	9.533232	0.953609	-0.07207	0.086481
ICAM1	-0.00675	8.631516	0.996538	-0.06065	0.072775
PSMB2	0.005653	5.881996	0.99623	-0.05871	0.070451
B2M	-0.03208	10.6792	0.951802	-0.05727	0.068724
GPR18	-0.16994	2.401381	0.945312	-0.05301	0.063613
PTPN1	-0.0986	6.636914	0.919021	-0.04691	0.056296
TNFAIP6	-0.1442	7.648415	0.922255	-0.03654	0.043849
IFNAR2	-0.17279	7.456626	0.731068	-0.034	0.040801
RIPK1	-0.19626	7.128929	0.804425	-0.02644	0.031722
MTHFD2	-0.34641	3.980219	0.897677	-0.01646	0.019757
PTPN6	-0.10653	10.05903	0.72979	-0.01646	0.019751
NUP93	-0.05854	5.893198	0.961594	-0.01292	0.015509
IL4R	-0.21468	8.52072	0.809367	-0.01229	0.014752
KLRK1	0.144179	-1.01303	0.962587	-0.01025	0.012302
BTG1	-0.10788	9.317086	0.868115	-0.00652	0.00782
C1R	-0.19247	3.034389	0.904758	0.003633	-0.00436
SPPL2A	-0.2022	7.339568	0.658397	0.013344	-0.01601
BANK1	-0.19	3.128764	0.941325	0.018476	-0.02217
CASP8	-0.1125	8.990252	0.821505	0.020063	-0.02408
FPR1	-0.06346	10.28565	0.8658	0.033443	-0.04013
TXNIP	-0.08595	10.89816	0.851807	0.038885	-0.04666
SSPN	-0.01027	0.560486	0.997847	0.039546	-0.04745
IFITM3	-0.33896	7.629275	0.841381	0.056934	-0.06832
PSMB10	-0.10203	6.389404	0.898434	0.062307	-0.07477
IL18BP	-0.20752	4.770427	0.922232	0.066202	-0.07944
IL15	-0.34949	1.467671	0.902992	0.070339	-0.08441
CDKN1A	-0.59421	4.440614	0.939162	0.07431	-0.08917
IRF8	-1.06365	2.031196	0.75904	0.100188	-0.12023

TNFAIP2	-0.27745	9.90159	0.546206	0.101134	-0.12136
NFKBIA	-0.23689	9.400806	0.830976	0.106969	-0.12836
NFKB1	-0.49629	7.407567	0.607157	0.145255	-0.17431
SRI	-0.21608	6.357185	0.689928	0.148857	-0.17863
UPP1	-0.48671	5.977836	0.579011	0.171798	-0.20616
CCL2	-0.64273	-0.32663	0.759122	0.17348	-0.20818
LATS2	-0.49469	4.313464	0.759122	0.221942	-0.26633
SOD2	-0.19822	11.03819	0.590146	0.284824	-0.34179
IL7	-0.99501	-1.33524	0.592182	0.342844	-0.41141
RAPGEF6	-0.66994	3.659684	0.577376	0.349515	-0.41942
CASP3	-0.96079	6.470721	0.294457	0.456167	-0.5474
ISOC1	-1.74512	4.531843	0.272325	0.509512	-0.61141

[‡]Genes ordered by greatest to least mean z-score in neutrophils of risk donors.

Supplemental Table 2. List of genes from RNA-seq analysis of risk and non-risk neutrophils that are enriched for in the IRF7 gene module.

Gene	logFC	AveExpr	adj.P.Val	Nonrisk_zscore	Risk_zscore‡
GBP4	2.013236	6.431283	0.05553	-0.7315	0.877805
OAS3	3.587099	6.677753	0.245195	-0.68673	0.824071
GBP1	1.16464	7.927452	0.192621	-0.66963	0.803561
DDX60	3.231271	5.020459	0.271077	-0.66933	0.803191
ETV7	3.117985	4.520753	0.185104	-0.63494	0.761931
EPSTI1	2.955831	5.847093	0.274052	-0.63124	0.757491
USP18	3.833699	1.65579	0.306876	-0.63119	0.757427
AGRN	2.688897	0.320029	0.374956	-0.62512	0.750147
TRIM22	1.133974	8.764396	0.272325	-0.62274	0.747284
OAS2	3.63527	5.670081	0.307169	-0.61513	0.738157
XAF1	2.222521	6.10037	0.272325	-0.61367	0.736399
RSAD2	2.225841	7.836573	0.306876	-0.61349	0.736188
C5orf56	0.822888	6.198883	0.245195	-0.60848	0.730178
IFIH1	1.336156	7.04697	0.294457	-0.60643	0.727711
IFI44L	2.910193	5.57444	0.294457	-0.60402	0.724824
PARP14	1.269638	8.350371	0.282368	-0.59441	0.71329
GALM	1.618497	5.045622	0.310907	-0.59242	0.710905
IFIT3	0.849758	9.545758	0.282368	-0.58763	0.705158
OAS1	3.146808	5.768667	0.317669	-0.58082	0.696986
IFIT2	0.583942	10.16949	0.328111	-0.57932	0.695184
APOL1	1.236541	6.320247	0.272325	-0.57705	0.692455
DDX60L	0.904753	8.777466	0.306876	-0.57436	0.689231
SAMD9	0.934352	8.088067	0.319671	-0.56773	0.681276
FRMD3	1.282397	2.528319	0.541294	-0.55547	0.666562
IFI44	2.175649	5.679361	0.421191	-0.55509	0.666111
HERC5	1.586341	7.344754	0.373527	-0.55347	0.664166
ZBP1	1.191914	7.15255	0.335207	-0.55118	0.661416
UBE2L6	0.553361	8.467125	0.283971	-0.54815	0.657786
SPATS2L	2.761086	2.388829	0.394976	-0.54449	0.653393
RNF213	0.943897	9.075008	0.272325	-0.5444	0.65328
RTP4	2.708668	1.849162	0.507846	-0.54292	0.651498
STAT2	1.367658	7.936125	0.300031	-0.54143	0.649713
SAMD9L	1.512003	7.474267	0.306876	-0.5352	0.64224
PML	1.037412	7.244391	0.313291	-0.53241	0.638891
CMPK2	1.79115	6.799807	0.450646	-0.5208	0.624959
IFIT1	1.322048	8.144368	0.349541	-0.51767	0.621205
ACO1	1.536985	3.662704	0.439921	-0.50848	0.610181
ANKFY1	0.719423	6.597416	0.407593	-0.50737	0.608849
DTX3L	0.998038	7.792876	0.355256	-0.50193	0.602313
ZCCHC2	1.447239	6.102986	0.356805	-0.49783	0.597398

TRAFD1	0.545708	8.502473	0.421191	-0.49043	0.588511
ISG15	0.948281	7.322094	0.411742	-0.48998	0.587972
PHF11	0.7026	6.913453	0.439921	-0.48805	0.585662
EIF2AK2	1.03032	7.578334	0.427401	-0.48463	0.581551
LAMP3	1.847747	3.159118	0.499302	-0.47511	0.570133
TMEM123	0.57058	8.799546	0.412503	-0.47467	0.569601
PARP9	0.698091	8.843862	0.460292	-0.47341	0.56809
DDX58	1.203808	8.240826	0.402647	-0.46882	0.56258
TOR1B	0.801883	6.901423	0.456386	-0.46284	0.555409
BATF2	1.794193	3.865681	0.502651	-0.45449	0.545394
DHX58	2.387049	4.833682	0.401029	-0.4542	0.545041
IFI6	0.768323	7.715076	0.431619	-0.45051	0.540617
SERPING1	1.190671	6.694962	0.508352	-0.45023	0.540282
PNPT1	1.906069	4.246327	0.450167	-0.44848	0.538174
KPTN	1.224452	3.761587	0.508352	-0.43949	0.527382
OASL	0.679545	8.236222	0.555387	-0.43656	0.523867
IFI35	1.058385	6.618874	0.460292	-0.43404	0.520853
PARP10	1.110812	7.414462	0.439921	-0.4307	0.516836
NUB1	0.518645	7.658763	0.351355	-0.42952	0.515426
C19orf66	0.95164	5.818562	0.43147	-0.42812	0.513741
IRF7	0.704715	7.661971	0.508352	-0.42599	0.511182
TRIM5	1.142677	5.593935	0.530098	-0.40915	0.49098
IFIT5	0.893544	7.106436	0.599214	-0.40525	0.486296
TDRD7	0.661513	6.781718	0.585039	-0.40093	0.481112
PARP12	0.974215	7.098405	0.575723	-0.39493	0.473912
MX1	1.048977	8.557206	0.508352	-0.39321	0.471855
CARD17	0.865251	0.669465	0.763367	-0.37312	0.447739
PLSCR1	0.518059	7.62291	0.664823	-0.35394	0.424729
TNFSF10	0.528891	8.606811	0.607157	-0.33289	0.399474
IFI16	0.437454	8.484854	0.694258	-0.32759	0.393109
RBCK1	0.35139	8.545606	0.582933	-0.32672	0.392061
KIAA0319L	0.634493	7.753865	0.608822	-0.32603	0.391241
EXOC3L1	1.377479	2.794163	0.641698	-0.29885	0.35862
DRAP1	0.359004	6.133415	0.646308	-0.29279	0.35135
MX2	0.234438	9.462204	0.713682	-0.2835	0.340203
USP25	0.182455	7.063234	0.901282	-0.27329	0.327949
SMTNL1	1.62105	2.134364	0.690782	-0.27245	0.326936
FANCA	0.629265	4.750824	0.658397	-0.27022	0.324265
NAPA	0.259072	7.602407	0.759122	-0.24698	0.296381
CHMP5	0.107353	7.263035	0.897533	-0.22312	0.267748
ACOT9	0.167009	7.069085	0.881989	-0.21804	0.261644
HES4	0.931122	4.123262	0.788625	-0.19892	0.238706
ZNF684	0.634263	2.963684	0.837951	-0.1958	0.234954
ZNFX1	0.023277	9.518983	0.962783	-0.1784	0.214085

ISG20	-0.04727	8.409447	0.949639	-0.15674	0.188087
NTNG2	0.303245	6.073647	0.884267	-0.13932	0.167186
TNFSF13B	0.064477	8.326103	0.94454	-0.12618	0.151414
TRIM26	0.020054	7.017271	0.987729	-0.09935	0.119218
IL1RN	-0.02837	8.777498	0.978044	-0.08468	0.101612
ABTB2	0.186814	3.355707	0.947069	-0.06569	0.078829
TNK2	0.075642	4.257492	0.967581	-0.03878	0.046533
GTPBP2	0.013779	4.80499	0.995166	0.034153	-0.04098

[‡]Genes ordered by greatest to least mean z-score in neutrophils of risk donors.

Supplemental Table 3. List of genes from RNA-seq analysis of risk and non-risk neutrophils that are enriched for in the ROS pathway gene module.

Gene	logFC	AveExpr	adj.P.Val	Nonrisk_zscore	Risk_zscore‡
IPCEF1	0.260167	7.20436	0.623586	-0.496875564	0.596251
GCLM	0.525556	4.423352	0.662834	-0.482280867	0.578737
PFKP	1.952134	2.591271	0.479347	-0.470737859	0.564885
PRNP	0.464653	4.945592	0.84707	-0.394493618	0.473392
PRDX2	0.804782	2.633242	0.712406	-0.351768261	0.422122
SOD1	0.12061	5.380286	0.91541	-0.303227424	0.363873
PRDX4	0.723121	2.15621	0.800086	-0.290748654	0.348898
PRDX1	0.141766	3.719594	0.950947	-0.249143142	0.298972
GLRX	0.224508	7.485011	0.834818	-0.219360625	0.263233
GSR	0.241863	7.053821	0.764332	-0.176071178	0.211285
STK25	0.322775	4.871118	0.892754	-0.15069047	0.180829
FES	0.035254	8.470414	0.965631	-0.143566253	0.17228
SCAF4	0.077791	6.201753	0.931995	-0.137197592	0.164637
NQO1	-0.07735	-0.98007	0.978044	-0.129394752	0.155274
SBNO2	-0.00219	6.578574	0.99852	-0.118678605	0.142414
MSRA	0.112898	3.786965	0.950805	-0.117545364	0.141054
LSP1	-0.03041	9.385395	0.954009	-0.11487507	0.13785
ABCC1	-0.34386	4.5994	0.857467	-0.083027573	0.099633
GCLC	-0.25674	2.099216	0.940962	-0.074362774	0.089235
OXSR1	-0.16048	6.908076	0.926588	-0.060642257	0.072771
CDKN2D	0.009602	8.94852	0.986582	-0.054261616	0.065114
GLRX2	-0.05729	3.143732	0.978915	-0.050314157	0.060377
HHEX	-0.0455	6.59467	0.969075	-0.040426087	0.048511
NDUFS2	-0.10829	7.29938	0.902573	-0.023622616	0.028347
TXNRD2	0.293683	2.244154	0.897533	-0.015174013	0.018209
MBP	-0.10715	9.598191	0.828953	-0.01140494	0.013686
JUNB	-0.03242	9.643176	0.954009	0.011042157	-0.01325
EGLN2	-0.16318	5.532282	0.898643	0.02293818	-0.02753
MGST1	-0.11909	1.859253	0.959981	0.034474507	-0.04137
ERCC2	-0.38523	-0.0519	0.908403	0.059380348	-0.07126
NDUFB4	-0.20027	5.001074	0.819602	0.066880297	-0.08026
TXN	-0.14788	7.351738	0.790878	0.080521964	-0.09663
CAT	-0.23978	9.279359	0.694975	0.085847536	-0.10302
TXNRD1	-0.58554	8.651626	0.653385	0.123305812	-0.14797
PRDX6	-0.27566	6.516602	0.694975	0.131225767	-0.15747
ATOX1	-0.32017	5.360477	0.694031	0.152894532	-0.18347
HMOX2	-0.21748	7.337457	0.647577	0.163067941	-0.19568
NDUFA6	-0.22773	5.395146	0.815493	0.173576833	-0.20829
MPO	-1.0457	2.556743	0.692063	0.17985059	-0.21582

G6PD	-0.59381	5.24759	0.678082	0.185734274	-0.22288
PDLIM1	-0.64509	4.568493	0.817818	0.226713235	-0.27206
FTL	-0.09452	9.487446	0.816569	0.231310617	-0.27757
SOD2	-0.19822	11.03819	0.590146	0.284823945	-0.34179
GPX3	-1.25376	6.230777	0.455259	0.31639183	-0.37967
GPX4	-0.49154	6.728011	0.449396	0.338764007	-0.40652
SRXN1	-1.19316	1.937779	0.480216	0.405499257	-0.4866

[‡]Genes ordered by greatest to least mean z-score in neutrophils of risk donors.

Supplemental Figures

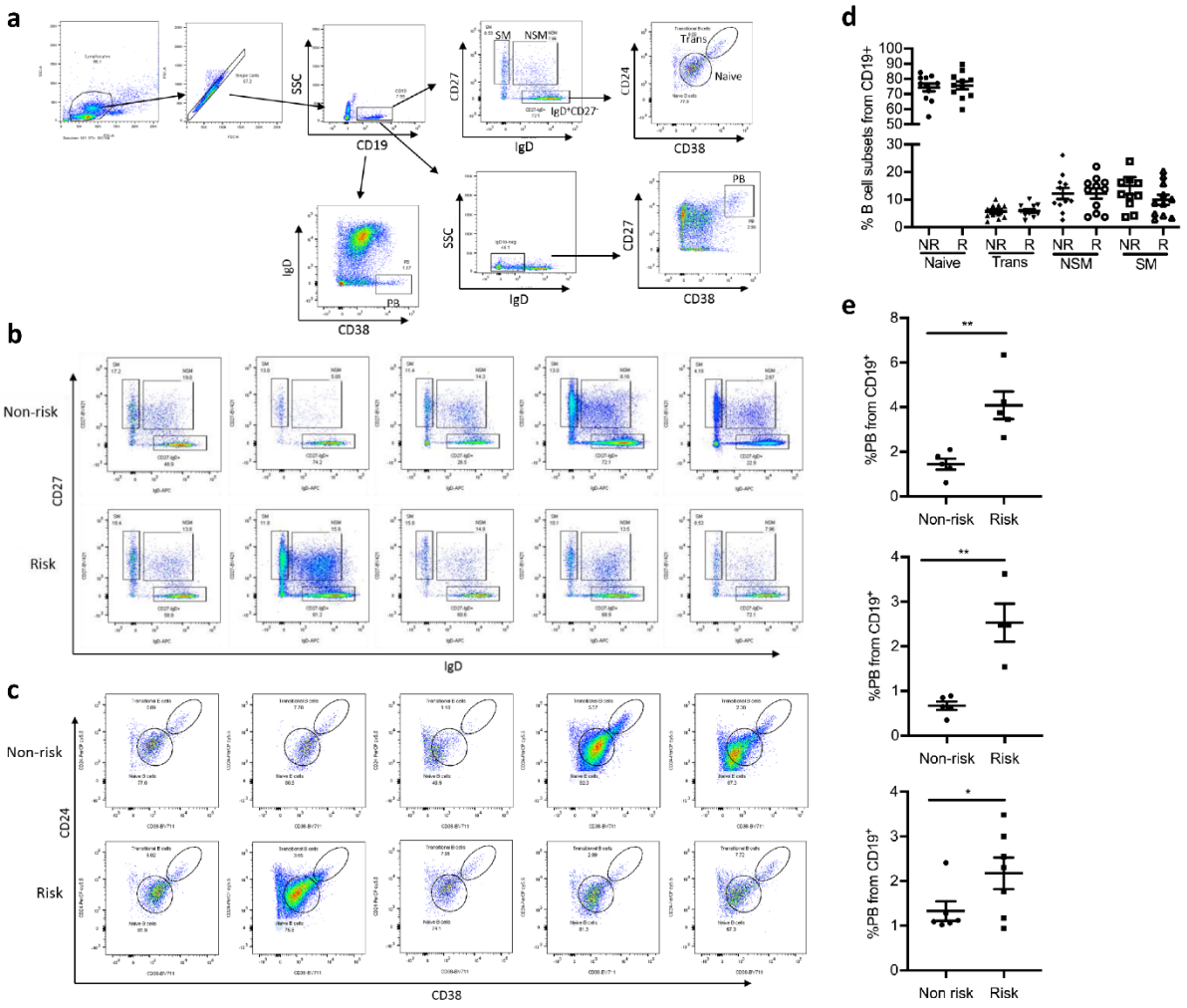

Figure S1. Healthy donor B cell subset analysis. (**a**) Representative flow cytometry gating strategy for human B cell subset analysis. (**b**) Representative dot plots of switched memory (SM), non-switched memory (NSM) and $IgD^{-}CD27^{-}$ B cells from independent donors. (**c**) Similar to (**b**) except transitional (Trans) and naïve B cell subsets are shown from independent donors. (**d**) Summarized B cell subset analysis of (**a-c**) shown as % subset from $CD19^{+}$ B cells (n=10 risk and non-risk donors). (**e**) Similar to **Fig. 2b** showing %PB from three additional independent rounds of blood draw. Single data points represent individual donors (unpaired two-tailed *t* test; n=4-7 donors per group). Data are presented as mean ± s.e.m.; * ($p \leq 0.05$), **($p \leq 0.01$).

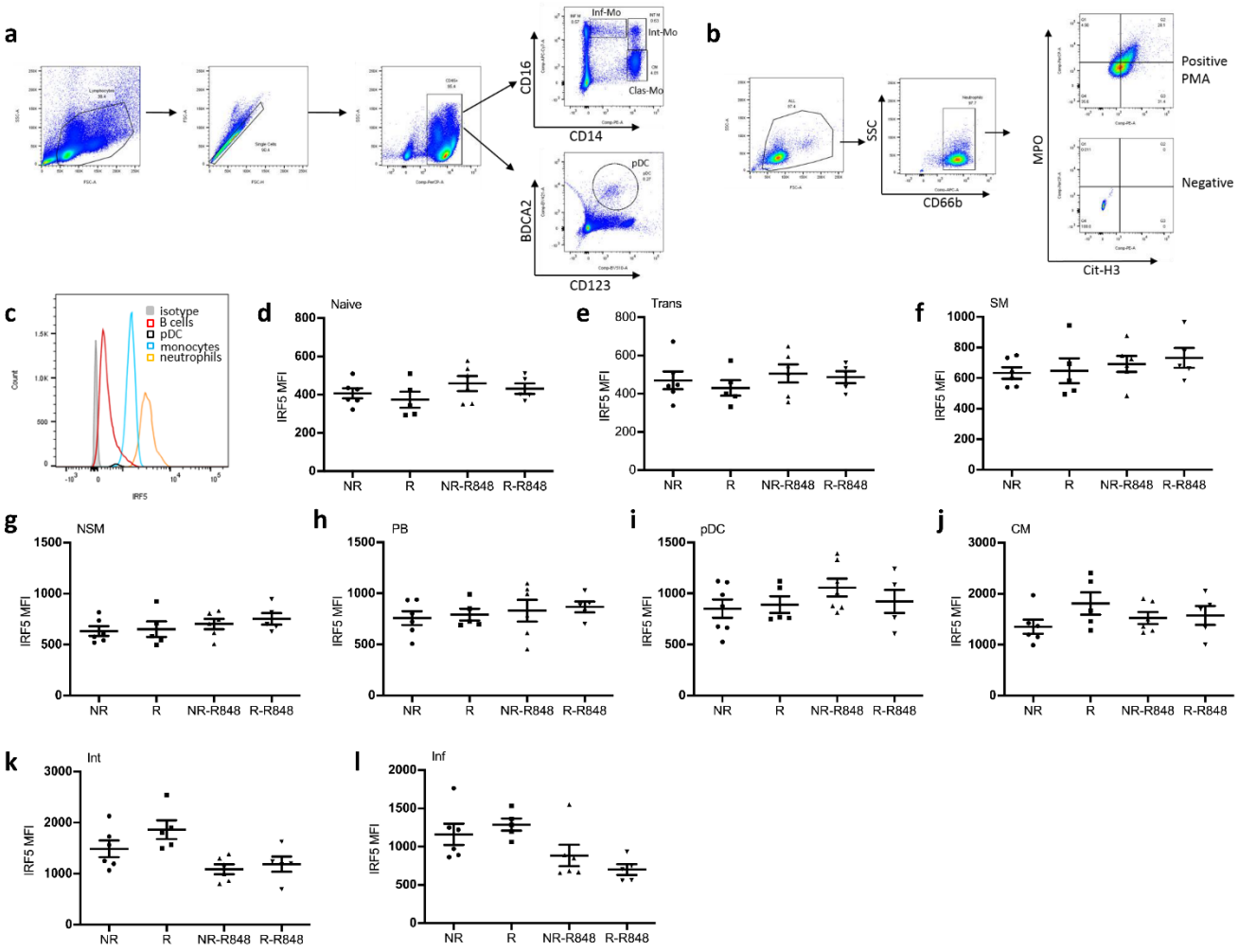

Figure S2. IRF5 expression analysis in lymphoid and myeloid cells. (**a**) Representative flow cytometry gating strategy for human monocyte subsets and plasmacytoid dendritic cells (pDCs). (**b**) Representative flow cytometry gating strategy for neutrophils and NETosis. (**c**) Representative histogram of IRF5 expression in multiple cell types. (**d-h**) IRF5 mean fluorescence intensity (MFI) is shown in B cell subsets before and after stimulation with R848; PB, plasma blasts. Same as (**d-h**) except IRF5 MFI in pDCs (**i**) and monocyte subsets (CM, classical monocytes; Int, intermediate; IFN, inflammatory) is shown (**j-l**).

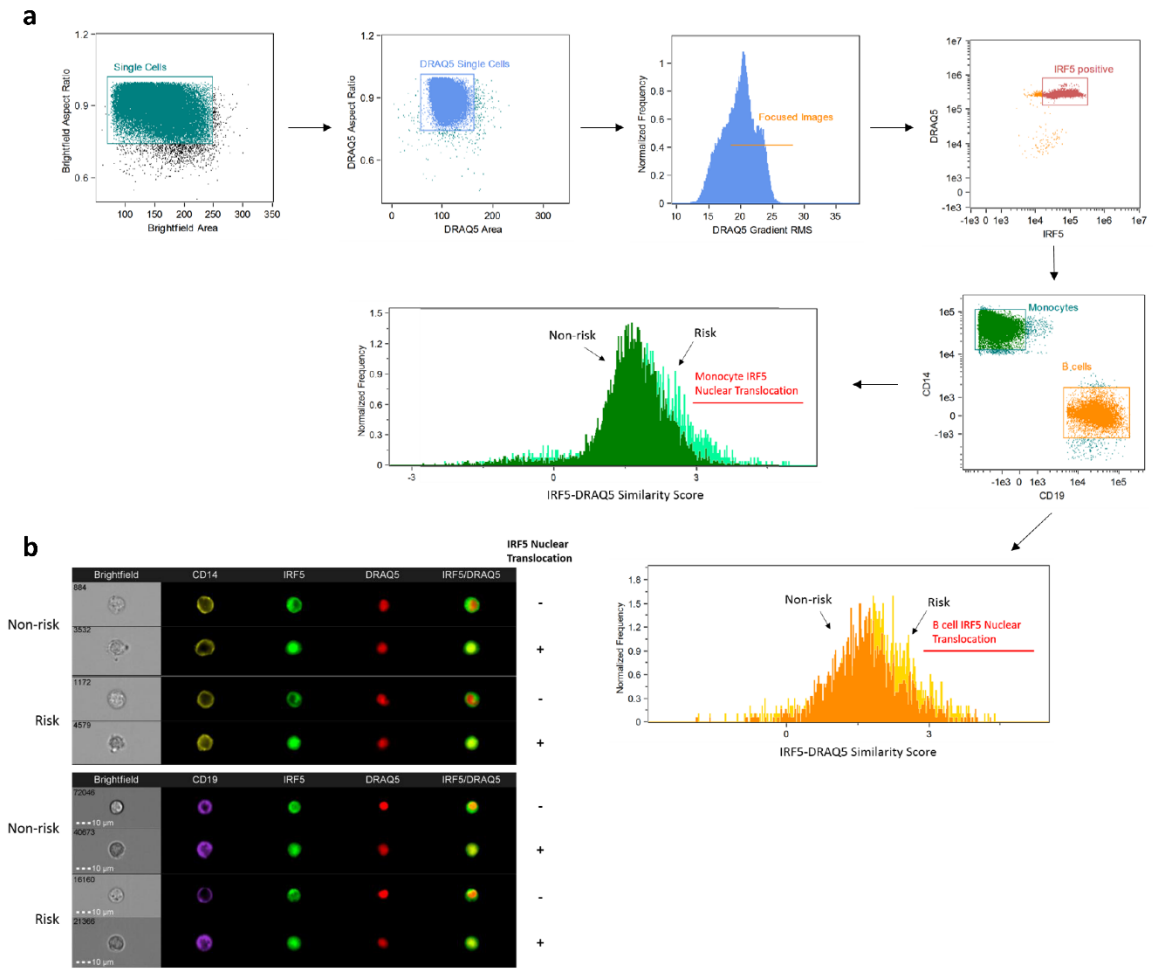

Figure S3. Representative gating scheme for imaging flow cytometry analysis of IRF5 nuclear translocation. (**a**) Gating scheme used for determining levels of human IRF5 nuclear translocation in different populations of immune cells by imaging flow cytometry. (**b**) Representative images of IRF5 cellular localization in $CD14^+$ monocytes and $CD19^+$ B cells from unstimulated risk and non-risk PBMCs using imaging flow cytometry with similar gating strategies as shown in (**a**).

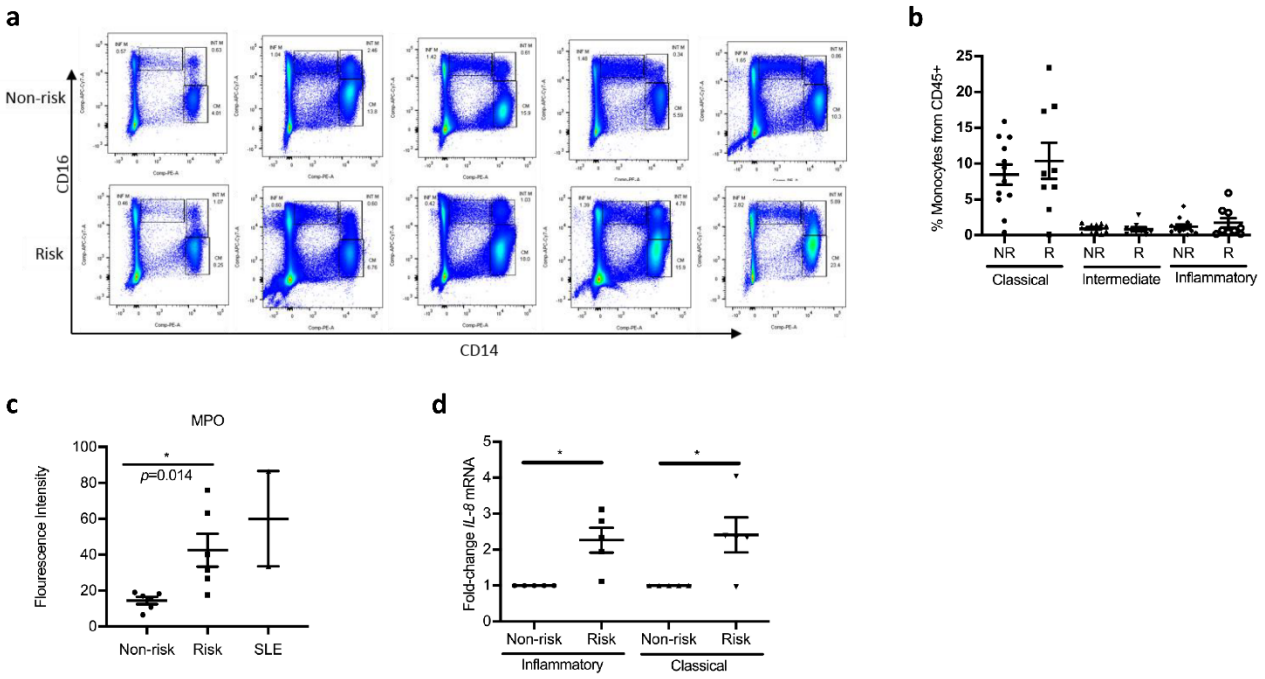

Figure S4. Healthy donor monocyte subset analysis. (**a**) Representative dot plots of classical, inflammatory and intermediate monocyte subsets in independent donors. (**b**) Summarized monocyte subset analysis from (**a**); n=12 non-risk (NR) and n=9 risk (R) donors. (**c**) Anti-MPO concentrations were determined by Luminex assay with a 1:50 serum dilution for GaP donors and 1:200 for SLE donors (unpaired two-tailed *t* test between non-risk and risk donors). Single data points represent individual donors; sera from n=6 risk and non-risk donors. Plotted data are after background subtraction. (**d**) *IL8* expression in sorted inflammatory and classical monocytes from a single round of homozygous risk and non-risk blood draws (n=5 donors per haplotype). Data are represented as fold mRNA expression in non-risk compared to risk; expression in non-risk was set at 1 (unpaired two-tailed *t* test). Data are presented as mean ± s.e.m. *($p \leq 0.05$).

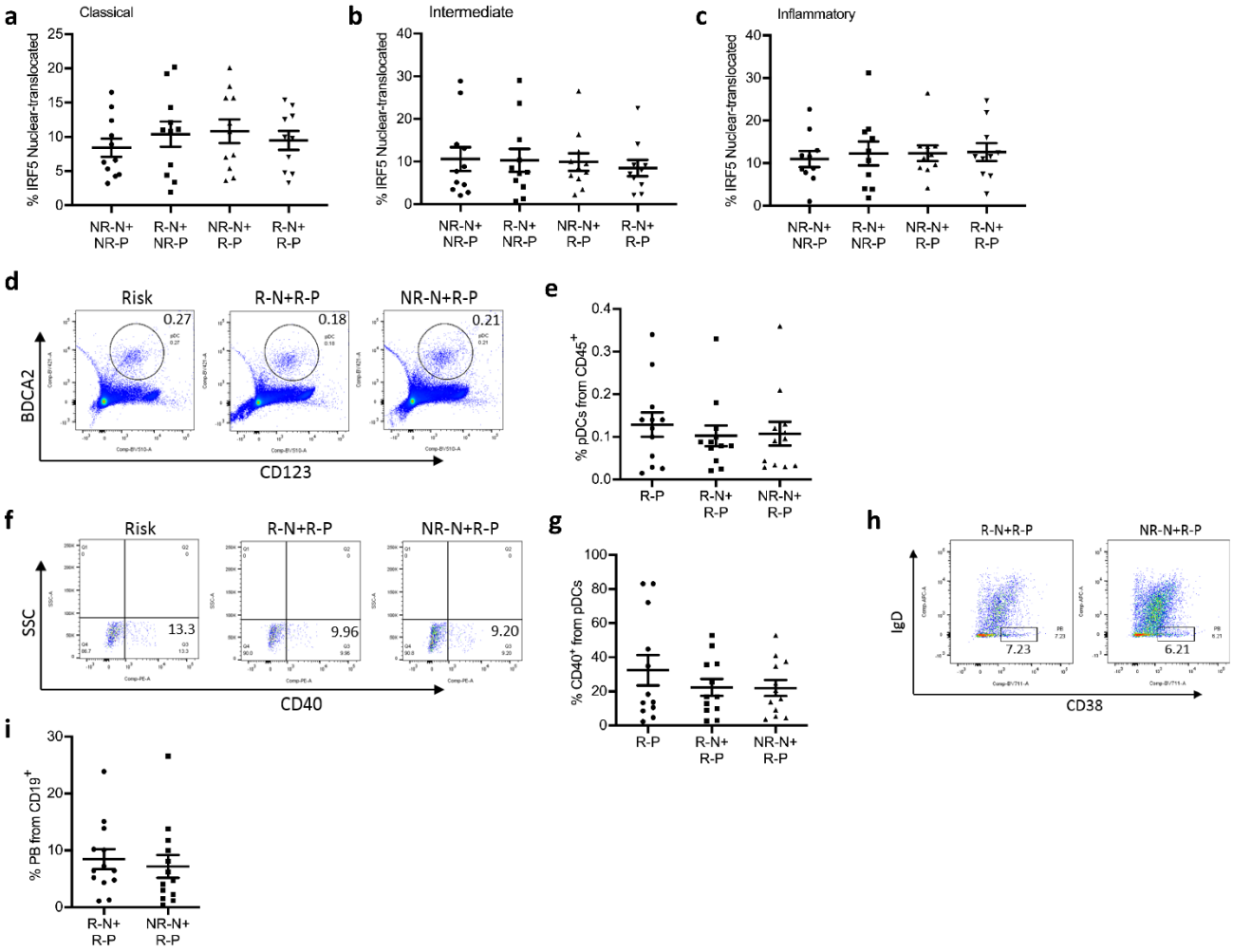

Figure S5. Controls for *ex vivo* co-culture of risk and non-risk neutrophils with risk PBMC. (**a-c**) Summarized data of % IRF5 nuclear translocation in monocyte subsets after 4 h co-culture using imaging flow cytometry; n=6-11 non-risk (NR) and risk (R) donors. (**d-e**) Representative dot plots and quantitation of % pDC from $CD45^+$ gate after overnight co-culture; n=12 non-risk and risk donors. (**f-g**) Representative dot plots and quantitation of % $CD40^+$ pDCs from (**d**); n=12 non-risk and risk donors. (**h-i**) Representative dot plots and quantitation of % PB after 7 day co-culture; n=13 non-risk and risk donors.