

The DEGs of DF patients' skin before and after LOT treatment

Gene name	Name	Ratio	t.test_p.value_BH correct	Regulated	LogFC
<i>RAB2B</i>	RAB2B, member RAS oncogene family (RAB2B)	0.098522	8.13E-08	Down	-3.34340399906633
<i>SMAD4</i>	SMAD family member 4 (SMAD4)	0.063471	1.23E-06	Down	-3.97775038261698
<i>SON</i>	SON DNA binding protein (SON)	0.16798	4.99E-06	Down	-2.57363985338707
<i>PER1</i>	Period circadian clock 1 (PER1)	0.114286	5.60E-06	Down	-3.12928241073314
<i>SMAD5</i>	SMAD family member 5 (SMAD5)	0.172911	5.60E-06	Down	-2.53189761194299
<i>GADD45A</i>	Growth arrest and DNA damage inducible alpha (GADD45A)	0.180555	9.07E-06	Down	-2.46948592540468
<i>PPTC7</i>	PTC7 protein phosphatase homolog (PPTC7)	0.034609	1.62E-05	Down	-4.85270085135868
<i>SIK2</i>	Salt inducible kinase 2 (SIK2)	0.047984	1.87E-05	Down	-4.38130366983787
<i>PES1</i>	Pescadillo ribosomal biogenesis factor 1 (PES1)	0.054895	2.08E-05	Down	-4.18716976283355
<i>SLC8B1</i>	Solute carrier family 8 member B1 (SLC8B1)	0.049658	2.39E-05	Down	-4.33181558646602
<i>SLC9A6</i>	Solute carrier family 9 member A6 (SLC9A6)	0.1148	2.39E-05	Down	-3.12280712869565
<i>SH3BGRL3</i>	SH3 domain binding glutamate rich protein like 3 (SH3BGRL3)	0.047194	2.58E-05	Down	-4.4052651726096
<i>RGS2</i>	Regulator of G-protein signaling 2 (RGS2)	0.237059	2.85E-05	Down	-2.0766813403905
<i>NFE2L1</i>	Nuclear factor, erythroid 2 like 1 (NFE2L1)	0.295515	3.14E-05	Down	-1.75869691899706
<i>PMM2</i>	Phosphomannomutase 2 (PMM2)	0.34548	4.50E-05	Down	-1.53332512898365
<i>SLC12A6</i>	Solute carrier family 12 member 6 (SLC12A6)	0.083417	4.50E-05	Down	-3.58351295148146
<i>SMPD1</i>	Sphingomyelin phosphodiesterase 1 (SMPD1)	0.047714	4.50E-05	Down	-4.38945774249509
<i>SNORD104</i>	Small nucleolar RNA, C/D box 104 (SNORD104)	0.074015	5.26E-05	Down	-3.75603436480077
<i>PECAM1</i>	Platelet and endothelial cell adhesion molecule 1 (PECAM1)	0.086855	6.38E-05	Down	-3.52525366672804
<i>PTDSS1</i>	Phosphatidylserine synthase 1 (PTDSS1)	0.108172	6.53E-05	Down	-3.20860212283817
<i>TES</i>	Testin LIM domain protein (TES)	0.070546	6.53E-05	Down	-3.8252879927501
<i>NFKB1</i>	Nuclear factor kappa B subunit 1 (NFKB1)	0.049101	6.96E-05	Down	-4.3481141544591
<i>LY96</i>	Lymphocyte antigen 96 (LY96)	0.028977	7.01E-05	Down	-5.10895510706339

<i>PGS1</i>	Phosphatidylglycerophosphate synthase 1 (PGS1)	0.060846	8.18E-05	Down	-4.03870379523681
<i>SPP1</i>	Secreted phosphoprotein 1 (SPP1)	0.20936	8.30E-05	Down	-2.25594010344047
<i>LHFP</i>	Lipoma HMGIC fusion partner (LHFP)	0.008344	9.90E-05	Down	-6.90500881998414
<i>RAP2B</i>	RAP2B, member of RAS oncogene family (RAP2B)	0.416238	9.90E-05	Down	-1.26451948846537
<i>SNX24</i>	Sorting nexin 24 (SNX24)	0.114956	9.90E-05	Down	-3.12084792614871
<i>SPA17</i>	Sperm autoantigenic protein 17 (SPA17)	0.077486	9.90E-05	Down	-3.68991364203799
<i>NFKBIA</i>	NFKB inhibitor alpha (NFKBIA)	0.378461	0.000105	Down	-1.40178299729822
<i>SLC43A1</i>	Solute carrier family 43 member 1 (SLC43A1)	0.188431	0.000105	Down	-2.40789232330013
<i>NMI</i>	N-myc and STAT interactor (NMI)	0.064217	0.00012	Down	-3.96090532319087
<i>TMEM150A</i>	Transmembrane protein 150A (TMEM150A)	0.073854	0.000129	Down	-3.75917066343629
<i>SLC2A3</i>	Solute carrier family 2 member 3 (SLC2A3)	0.106634	0.000138	Down	-3.22925625729445
<i>SORL1</i>	Sortilin related receptor 1 (SORL1)	0.333348	0.000145	Down	-1.58489888255056
<i>ADK</i>	Adenosine kinase (ADK)	0.043125	0.000151	Down	-4.53531558943942
<i>ETS1</i>	ETS proto-oncogene 1, transcription factor (ETS1)	0.356094	0.000153	Down	-1.48967098849693
<i>C1orf162</i>	Chromosome 1 open reading frame 162 (c1orf162)	0.124493	0.000161	Down	-3.00586071329064
<i>RRP1B</i>	Ribosomal RNA processing 1B (RRP1B)	0.020316	0.000161	Down	-5.62124157909054
<i>A1BG</i>	Alpha-1-B glycoprotein (A1BG)	0.020403	0.000171	Down	-5.61508689664039
<i>SETD1B</i>	SET domain containing 1B (SETD1B)	0.018004	0.000171	Down	-5.79557191014966
<i>MICAL1</i>	Microtubule associated monooxygenase, calponin and LIM domain containing 1 (MICAL1)	0.153776	0.000179	Down	-2.70110117186816
<i>SNX25</i>	Sorting nexin 25 (SNX25)	0.06305	0.000192	Down	-3.98735922232049
<i>A2M</i>	Alpha-2-macroglobulin (A2M)	0.032407	0.000197	Down	-4.94755965071926
<i>ACTL6A</i>	Actin like 6A (ACTL6A)	0.04529	0.000197	Down	-4.46467798363682
<i>AGA</i>	Aspartylglucosaminidase (AGA)	0.064384	0.000197	Down	-3.95714450489272
<i>CIC</i>	Capicua transcriptional repressor (CIC)	0.026721	0.000197	Down	-5.2258800073632
<i>LY6G5C</i>	Lymphocyte antigen 6 complex, locus G5C (LY6G5C)	0.031786	0.000239	Down	-4.97545760614835
<i>FRMD4B</i>	FERM domain containing 4B (FRMD4B)	0.016082	0.00025	Down	-5.95841678194989

<i>LRPAP1</i>	LDL receptor related protein associated protein 1 (LRPAP1)	0.027729	0.000271	Down	-5.17245351952459
<i>Mitochondrial</i>	Aldehyde dehydrogenase 2 family (mitochondrial) (ALDH2)	0.431939	0.000284	Down	-1.21110024811187
<i>ENY2</i>	ENY2, transcription and export complex 2 subunit (ENY2)	0.108753	0.000286	Down	-3.20086777795538
<i>SEPT6</i>	Septin 6 (SEPT6)	0.020319	0.000286	Down	-5.62105219784796
<i>ACLY</i>	ATP citrate lyase (ACLY)	0.064351	0.000335	Down	-3.9578880114056
<i>LONP2</i>	Lon peptidase 2, peroxisomal (LONP2)	0.049757	0.000361	Down	-4.32894630307308
<i>LONP1</i>	Lon peptidase 1, mitochondrial (LONP1)	0.01657	0.000378	Down	-5.91530635896366
<i>RNF19A</i>	Ring finger protein 19A, RBR E3 ubiquitin protein ligase (RNF19A)	0.291375	0.000408	Down	-1.77905267498729
<i>SP3</i>	Sp3 transcription factor (SP3)	0.400689	0.000408	Down	-1.31944494761374
<i>CD9</i>	CD9 molecule (CD9)	0.241851	0.000418	Down	-2.04780875207131
<i>DNAJC18</i>	Dnaj heat shock protein family (Hsp40) member C18 (DNAJC18)	0.423985	0.000418	Down	-1.23791318119873
<i>DYNLT1</i>	Dynein light chain Tctex-type 1 (DYNLT1)	0.450767	0.000418	Down	-1.14954523800549
<i>EEF1E1</i>	Eukaryotic translation elongation factor 1 epsilon 1 (EEF1E1)	0.469027	0.000418	Down	-1.0922581916577
<i>AGL</i>	Amylo-alpha-1, 6-glucosidase, 4-alpha-glucanotransferase (AGL)	0.067165	0.000459	Down	-3.89613938761968
<i>PYROXD1</i>	Pyridine nucleotide-disulphide oxidoreductase domain 1 (PYROXD1)	0.348576	0.000468	Down	-1.52045423860173
<i>VWA8</i>	Von Willebrand factor A domain containing 8 (VWA8)	0.037498	0.000491	Down	-4.73703079894191
<i>COMMD1</i>	Copper metabolism domain containing 1 (COMMD1)	0.318611	0.000497	Down	-1.65013009395106
<i>MRPS18A</i>	Mitochondrial ribosomal protein S18A (MRPS18A)	0.301971	0.000508	Down	-1.72751958618324
<i>RNF166</i>	Ring finger protein 166 (RNF166)	0.438057	0.000541	Down	-1.19080965157494
<i>PURA</i>	Purine rich element binding protein A (PURA)	0.1688	0.000576	Down	-2.56660919242841
<i>AKIP1</i>	A-kinase interacting protein 1 (AKIP1)	0.099343	0.000577	Down	-3.33143695921524
<i>IRF8</i>	Interferon regulatory factor 8 (IRF8)	0.035186	0.000584	Down	-4.82887407810453
<i>LYL1</i>	LYL1, basic helix-loop-helix family member (LYL1)	0.041433	0.000586	Down	-4.59309016812694
<i>SPN</i>	Sialophorin (SPN)	0.17031	0.000603	Down	-2.5537654793193

<i>UCHL3</i>	Ubiquitin C-terminal hydrolase L3 (UCHL3)	0.289603	0.000606	Down	-1.78784931690686
<i>KCTD13</i>	Potassium channel tetramerization domain containing 13 (KCTD13)	0.155977	0.000619	Down	-2.6805901679219
<i>KIAA1551</i>	Kiaa1551 (kiaa1551)	0.466244	0.000619	Down	-1.10084154739718
<i>CALN1</i>	Calneuron 1 (CALN1)	0.398539	0.000635	Down	-1.32720859456831
<i>GRN</i>	Granulin precursor (GRN)	0.209288	0.000635	Down	-2.25644012090858
<i>CALML6</i>	Calmodulin like 6 (CALML6)	0.3878	0.000644	Down	-1.36661364241274
<i>KCNJ2</i>	Potassium voltage-gated channel subfamily J member 2 (KCNJ2)	0.086811	0.000644	Down	-3.52597852375468
<i>ANKLE2</i>	Ankyrin repeat and LEM domain containing 2 (ANKLE2)	0.013435	0.000661	Down	-6.21790358795515
<i>CASP3</i>	Caspase 3 (CASP3)	0.482344	0.000666	Down	-1.05186569127556
<i>AIF1</i>	Allograft inflammatory factor 1 (AIF1)	0.439016	0.000675	Down	-1.18765533638056
<i>GCC1</i>	GRIP and coiled-coil domain containing 1 (GCC1)	0.120828	0.000675	Down	-3.04897914401809
<i>RPS6</i>	Ribosomal protein S6 (RPS6)	0.305941	0.000708	Down	-1.70867300637063
<i>SERPINB9</i>	Serpin family B member 9 (SERPINB9)	0.202197	0.000708	Down	-2.30616808478251
<i>CD86</i>	CD86 molecule (CD86)	0.338158	0.000812	Down	-1.56422928786777
<i>IGFBP3</i>	Insulin like growth factor binding protein 3 (IGFBP3)	0.039735	0.000909	Down	-4.65345965595609
<i>TGM2</i>	Transglutaminase 2 (TGM2)	0.24621	0.000913	Down	-2.02204084448951
<i>FGF2</i>	Fibroblast growth factor 2 (FGF2)	0.178969	0.000915	Down	-2.48221688922575
<i>FAM134A</i>	Family with sequence similarity 134 member A (FAM134A)	0.116354	0.000943	Down	-3.10341004102814
<i>FBXL6</i>	F-box and leucine rich repeat protein 6 (FBXL6)	0.145696	0.000991	Down	-2.7789683803181
<i>GDF15</i>	Growth differentiation factor 15 (GDF15)	0.471223	0.000991	Down	-1.08551872785048
<i>IL6</i>	Interleukin 6 (IL6)	0.022068	0.001021	Down	-5.50187720379893
<i>RGS10</i>	Regulator of G-protein signaling 10 (RGS10)	0.377331	0.001033	Down	-1.4060959649548
<i>SLC12A8</i>	Solute carrier family 12 member 8 (SLC12A8)	0.25146	0.001033	Down	-1.99159685699665
<i>LYN</i>	LYN proto-oncogene, Src family tyrosine kinase (LYN)	0.058445	0.001034	Down	-4.09678355717871
<i>ARHGAP22</i>	Rho gtpase activating protein 22 (ARHGAP22)	0.297763	0.001078	Down	-1.74776370487157
<i>ETV5</i>	ETS variant 5 (ETV5)	0.405923	0.001078	Down	-1.3007209738125
<i>GLRX3</i>	Glutaredoxin 3 (GLRX3)	0.222281	0.001078	Down	-2.16954428393854

<i>PTPRE</i>	Protein tyrosine phosphatase, receptor type E (PTPRE)	0.203297	0.001093	Down	-2.29833845349229
<i>GNB5</i>	G protein subunit beta 5 (GNB5)	0.49796	0.001131	Down	-1.00589686615065
<i>NBPF4</i>	Neuroblastoma breakpoint family member 4 (NBPF4)	0.240995	0.00116	Down	-2.0529277600225
<i>CSTA</i>	Cystatin A (CSTA)	0.27591	0.001243	Down	-1.85773042819252
<i>SOD1</i>	Superoxide dismutase 1, soluble (SOD1)	0.107802	0.00125	Down	-3.21353997341628
<i>AGPAT3</i>	1-acylglycerol-3-phosphate O-acyltransferase 3 (AGPAT3)	0.171729	0.001307	Down	-2.54179550238126
<i>IL4I1</i>	Interleukin 4 induced 1 (IL4I1)	0.015722	0.001347	Down	-5.99108043112038
<i>RYBP</i>	RING1 and YY1 binding protein (RYBP)	0.357264	0.001494	Down	-1.48493952482643
<i>CYP2A6</i>	Cytochrome P450 family 2 subfamily A member 6 (CYP2A6)	0.090136	0.001527	Down	-3.47174674350178
<i>CDC34</i>	Cell division cycle 34 (CDC34)	0.067665	0.001561	Down	-3.8854460966929
<i>EMP1</i>	Epithelial membrane protein 1 (EMP1)	0.349099	0.001681	Down	-1.51829355000211
<i>AIMP1</i>	Aminoacyl trna synthetase complex interacting multifunctional protein 1 (AIMP1)	0.376011	0.001683	Down	-1.41115240507145
<i>GBP1</i>	Guanylate binding protein 1 (GBP1)	0.325332	0.001683	Down	-1.620013363294
<i>ACAT1</i>	Acetyl-coa acetyltransferase 1 (ACAT1)	0.362313	0.001722	Down	-1.46468984431065
<i>AGPAT4</i>	1-acylglycerol-3-phosphate O-acyltransferase 4 (AGPAT4)	0.230045	0.001738	Down	-2.12001105507518
<i>BIRC2</i>	Baculoviral IAP repeat containing 2 (BIRC2)	0.177427	0.001738	Down	-2.49470616745235
<i>CTSB</i>	Cathepsin B (CTSB)	0.101512	0.001738	Down	-3.30028420627336
<i>CTSL</i>	Cathepsin L (CTSL)	0.080119	0.001738	Down	-3.6417102470482
<i>DCXR</i>	Dicarbonyl and L-xylulose reductase (DCXR)	0.161358	0.001738	Down	-2.63166505851579
<i>BCL2</i>	BCL2, apoptosis regulator (BCL2)	0.334301	0.001842	Down	-1.58077938546548
<i>LRR1</i>	Leucine rich repeat protein 1 (LRR1)	0.03925	0.001935	Down	-4.67116610467102
<i>APEH</i>	Acylaminoacyl-peptide hydrolase (APEH)	0.420388	0.001942	Down	-1.25020542108095
<i>ACTN1</i>	Actinin alpha 1 (ACTN1)	0.064514	0.001969	Down	-3.95424483182754
<i>GADD45B</i>	Growth arrest and DNA damage inducible beta (GADD45B)	0.137104	0.002016	Down	-2.86665297204716
<i>RPS23</i>	Ribosomal protein S23 (RPS23)	0.294704	0.002153	Down	-1.76266250160489
<i>AAED1</i>	Ahpc/TSA antioxidant enzyme	0.054056	0.002164	Down	-4.20940538135327

	domain containing 1 (AED1)				
<i>EIF2AK2</i>	Eukaryotic translation initiation factor 2 alpha kinase 2 (EIF2AK2)	0.187265	0.002164	Down	-2.41684377821553
<i>IL1B</i>	Interleukin 1 beta (IL1B)	0.012179	0.002164	Down	-6.35951699536248
<i>N4BP3</i>	NEDD4 binding protein 3 (N4BP3)	0.01222	0.002281	Down	-6.35455865947947
<i>TRIB3</i>	Tribbles pseudokinase 3 (TRIB3)	0.269249	0.002281	Down	-1.89298604820671
<i>CD44</i>	CD44 molecule (Indian blood group) (CD44)	0.066562	0.00233	Down	-3.909167263077
<i>ATG10</i>	Autophagy related 10 (ATG10)	0.407645	0.002351	Down	-1.29461470970639
<i>CYFIP2</i>	Cytoplasmic FMR1 interacting protein 2 (CYFIP2)	0.091533	0.002351	Down	-3.4495634373281
<i>ABCB1</i>	ATP binding cassette subfamily B member 1 (ABCB1)	0.151551	0.002356	Down	-2.72212149754194
<i>CXCL8</i>	C-X-C motif chemokine ligand 8 (CXCL8)	0.074094	0.002376	Down	-3.75449697789106
<i>TCEA2</i>	Transcription elongation factor A2 (TCEA2)	0.124549	0.002516	Down	-3.00522011754964
<i>SPNS1</i>	Sphingolipid transporter 1 (putative) (SPNS1)	0.217352	0.002524	Down	-2.20189446258972
<i>BRF2</i>	BRF2, RNA polymerase III transcription initiation factor 50 kda subunit (BRF2)	0.428304	0.00256	Down	-1.22329440633313
<i>TBCD</i>	Tubulin folding cofactor D (TBCD)	0.167763	0.00256	Down	-2.57550083478457
<i>AIMP2</i>	Aminoacyl tRNA synthetase complex interacting multifunctional protein 2 (AIMP2)	0.278004	0.002602	Down	-1.84682249984258
<i>IGFBP7</i>	Insulin like growth factor binding protein 7 (IGFBP7)	0.011651	0.00263	Down	-6.4234438606148
<i>CCNE1</i>	Cyclin E1 (CCNE1)	0.298929	0.002776	Down	-1.742126467053
<i>CRYL1</i>	Crystallin lambda 1 (CRYL1)	0.456936	0.002779	Down	-1.12993634831563
<i>PXMP2</i>	Peroxisomal membrane protein 2 (PXMP2)	0.304179	0.003298	Down	-1.71700706870624
<i>SOX4</i>	SRY-box 4 (SOX4)	0.178896	0.003298	Down	-2.48280610549122
<i>MRPL58</i>	Mitochondrial ribosomal protein L58 (MRPL58)	0.233827	0.003337	Down	-2.09648807921352
<i>CDK19</i>	Cyclin dependent kinase 19 (CDK19)	0.387329	0.003498	Down	-1.36836984189414
<i>ATP2A3</i>	ATPase sarcoplasmic/endoplasmic reticulum Ca ²⁺ transporting 3 (ATP2A3)	0.460543	0.003743	Down	-1.11859126989136
<i>CUL3</i>	Cullin 3 (CUL3)	0.067876	0.003847	Down	-3.88095261627416
<i>AKR1A1</i>	Aldo-keto reductase family 1 member A1 (AKR1A1)	0.443697	0.003871	Down	-1.1723549178822

<i>MMP14</i>	Matrix metalloproteinase 14 (MMP14)	0.371057	0.003904	Down	-1.43028732520464
<i>IRGQ</i>	Immunity related gtpase Q (IRGQ)	0.099775	0.004043	Down	-3.3251811757145
<i>MMP8</i>	Matrix metalloproteinase 8 (MMP8)	0.335242	0.004124	Down	-1.57672455486082
<i>XIAP</i>	X-linked inhibitor of apoptosis (XIAP)	0.389797	0.004124	Down	-1.35920433377468
<i>DDB2</i>	Damage specific DNA binding protein 2 (DDB2)	0.134266	0.004197	Down	-2.89683452048886
<i>F3</i>	Coagulation factor III, tissue factor (F3)	0.474027	0.004246	Down	-1.07695746639589
<i>RELA</i>	RELA proto-oncogene, NF-kb subunit (RELA)	0.495377	0.004335	Down	-1.01340044306955
<i>S100A6</i>	S100 calcium binding protein A6 (S100A6)	0.325383	0.004358	Down	-1.61979022531264
<i>CTSF</i>	Cathepsin F (CTSF)	0.065816	0.004435	Down	-3.9254151019258
<i>CSF2</i>	Colony stimulating factor 2 (CSF2)	0.102013	0.004456	Down	-3.29317830774019
<i>EEF2</i>	Eukaryotic translation elongation factor 2 (EEF2)	0.181214	0.004638	Down	-2.46423096419523
<i>FAHD1</i>	Fumarylacetoacetate hydrolase domain containing 1 (FAHD1)	0.146594	0.004638	Down	-2.77009967835494
<i>SNRPF</i>	Small nuclear ribonucleoprotein polypeptide F (SNRPF)	0.182545	0.004884	Down	-2.4536769999095
<i>ALDH6A1</i>	Aldehyde dehydrogenase 6 family member A1 (ALDH6A1)	0.248144	0.005003	Down	-2.01075135263587
<i>TNFAIP8</i>	TNF alpha induced protein 8 (TNFAIP8)	0.145234	0.005131	Down	-2.78354548258539
<i>AKR1B1</i>	Aldo-keto reductase family 1 member B (AKR1B1)	0.446025	0.005326	Down	-1.16480446176155
<i>DYNLL1</i>	Dynein light chain LC8-type 1 (DYNLL1)	0.423754	0.005424	Down	-1.23869980742113
<i>LGALS9</i>	Galectin 9 (LGALS9)	0.04311	0.005424	Down	-4.5358216570656
<i>CAV1</i>	Caveolin 1 (CAV1)	0.427459	0.005495	Down	-1.2261406023496
<i>PPM1G</i>	Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1G (PPM1G)	0.499388	0.005555	Down	-1.00176627023941
<i>DUSP1</i>	Dual specificity phosphatase 1 (DUSP1)	0.425576	0.005568	Down	-1.2325101179976
<i>DUSP11</i>	Dual specificity phosphatase 11 (DUSP11)	0.395736	0.005568	Down	-1.33739100689655
<i>DAPK3</i>	Death associated protein kinase 3 (DAPK3)	0.123974	0.005612	Down	-3.01189560078496
<i>RPS6KA2</i>	Ribosomal protein S6 kinase A2 (RPS6KA2)	0.460161	0.005703	Down	-1.11978827331252
<i>VAMP8</i>	Vesicle associated membrane protein 8 (VAMP8)	0.189594	0.005957	Down	-2.39901462547736

<i>SSBP1</i>	Single stranded DNA binding protein 1 (SSBP1)	0.367532	0.005966	Down	-1.44405652691061
<i>DDIT4</i>	DNA damage inducible transcript 4 (DDIT4)	0.162493	0.006159	Down	-2.62155018062532
<i>EMP2</i>	Epithelial membrane protein 2 (EMP2)	0.348522	0.006316	Down	-1.52067842436482
<i>PIK3IP1</i>	Phosphoinositide-3-kinase interacting protein 1 (PIK3IP1)	0.402139	0.006375	Down	-1.31423393299884
<i>PIN1</i>	Peptidylprolyl cis/trans isomerase, NIMA-interacting 1 (PIN1)	0.421508	0.006482	Down	-1.24636825015029
<i>ATG13</i>	Autophagy related 13 (ATG13)	0.37909	0.00654	Down	-1.39938765313219
<i>LRFN3</i>	Leucine rich repeat and fibronectin type III domain containing 3 (LRFN3)	0.486007	0.006659	Down	-1.04094993124305
<i>BAMBI</i>	BMP and activin membrane bound inhibitor (BAMBI)	0.372804	0.006673	Down	-1.42350928629695
<i>RGS3</i>	Regulator of G-protein signaling 3 (RGS3)	0.277922	0.006688	Down	-1.8472492674819
<i>ETS2</i>	ETS proto-oncogene 2, transcription factor (ETS2)	0.375789	0.006884	Down	-1.41200534082822
<i>TRIM13</i>	Tripartite motif containing 13 (TRIM13)	0.431377	0.006895	Down	-1.21297879713829
<i>CXCL2</i>	C-X-C motif chemokine ligand 2 (CXCL2)	0.180542	0.007428	Down	-2.46959249472134
<i>DDIT3</i>	DNA damage inducible transcript 3 (DDIT3)	0.350555	0.007642	Down	-1.51228614467852
<i>AKR7A2</i>	Aldo-keto reductase family 7 member A2 (AKR7A2)	0.344742	0.007744	Down	-1.53641302066469
<i>GALM</i>	Galactose mutarotase (GALM)	0.224345	0.007744	Down	-2.15620617839963
<i>HNRNPDL</i>	Heterogeneous nuclear ribonucleoprotein D like (HNRNPDL)	0.483167	0.007744	Down	-1.0494056659896
<i>CLU</i>	Clustered mitochondria (CLU)	0.347234	0.007984	Down	-1.52601833319931
<i>ABCB6</i>	ATP binding cassette subfamily B member 6 (Langereis blood group) (ABCB6)	0.129393	0.008217	Down	-2.95016965356531
<i>ABHD2</i>	Abhydrolase domain containing 2 (ABHD2)	0.073993	0.008632	Down	-3.75645807901978
<i>ABHD6</i>	Abhydrolase domain containing 6 (ABHD6)	0.133425	0.008793	Down	-2.90589532681397
<i>ACYP1</i>	Acylphosphatase 1 (ACYP1)	0.15438	0.009101	Down	-2.69543772941336
<i>CASP7</i>	Caspase 7 (CASP7)	0.210861	0.009101	Down	-2.24563552870839
<i>FXN</i>	Fratxin (FXN)	0.221626	0.009101	Down	-2.17380003738011
<i>ABCC1</i>	ATP binding cassette subfamily C	0.086234	0.009254	Down	-3.53560486822749

	member 1 (ABCC1)				
<i>HSF1</i>	Heat shock transcription factor 1 (HSF1)	0.181734	0.009254	Down	-2.46009982324601
<i>IRF1</i>	Interferon regulatory factor 1 (IRF1)	0.071282	0.009254	Down	-3.81031361171021
<i>KLF4</i>	Kruppel like factor 4 (KLF4)	0.030826	0.009254	Down	-5.01971272952549
<i>ACYP2</i>	Acylphosphatase 2 (ACYP2)	0.471273	0.009265	Down	-1.08536484270474
<i>ACP2</i>	Acid phosphatase 2, lysosomal (ACP2)	0.188264	0.009385	Down	-2.40916807088232
<i>ACP1</i>	Acid phosphatase 1, soluble (ACP1)	0.173927	0.009449	Down	-2.52344241550397
<i>ACSS2</i>	Acyl-coa synthetase short-chain family member 2 (ACSS2)	0.167175	0.009449	Down	-2.58056601990857
<i>MAPKAPK2</i>	Mitogen-activated protein kinase-activated protein kinase 2 (MAPKAPK2)	0.457918	0.009462	Down	-1.12683901862476
<i>MRPS23</i>	Mitochondrial ribosomal protein S23 (MRPS23)	0.485181	0.009634	Down	-1.0434063146589
<i>CTSC</i>	Cathepsin C (CTSC)	0.07155	0.009657	Down	-3.80490607133633
<i>CYP2R1</i>	Cytochrome P450 family 2 subfamily R member 1 (CYP2R1)	0.273262	0.009738	Down	-1.87164509665595
<i>TAB2</i>	TGF-beta activated kinase 1/MAP3K7 binding protein 2 (TAB2)	0.264563	0.009745	Down	-1.91831554068039
<i>LGALS3BP</i>	Galectin 3 binding protein (LGALS3BP)	0.031082	0.009768	Down	-5.00779949664096
<i>CAPN2</i>	Calpain 2 (CAPN2)	0.494877	0.009794	Down	-1.01485919259783
<i>CSAD</i>	Cysteine sulfinic acid decarboxylase (CSAD)	0.494266	0.009952	Down	-1.01664086721974
<i>MMP7</i>	Matrix metalloproteinase 7 (MMP7)	0.406686	0.009961	Down	-1.29801338679026
<i>CD33</i>	CD33 molecule (CD33)	0.300496	0.010008	Down	-1.73458400127007
<i>FBXL5</i>	F-box and leucine rich repeat protein 5 (FBXL5)	0.198312	0.010008	Down	-2.33415642943915
<i>TMEM158</i>	Transmembrane protein 158 (gene/pseudogene) (TMEM158)	0.153623	0.010183	Down	-2.70253582070798
<i>CDC37</i>	Cell division cycle 37 (CDC37)	0.400969	0.010763	Down	-1.31843741057779
<i>ANXA5</i>	Annexin A5 (ANXA5)	0.211287	0.010884	Down	-2.2427240629672
<i>BTG3</i>	BTG anti-proliferation factor 3 (BTG3)	0.298651	0.010985	Down	-1.74346721144413
<i>PLAC8</i>	Placenta specific 8 (PLAC8)	0.402745	0.011102	Down	-1.31206297631226
<i>ABHD4</i>	Abhydrolase domain containing 4 (ABHD4)	0.14521	0.011171	Down	-2.78378415688044
<i>PYROXD2</i>	Pyridine nucleotide-disulphide oxidoreductase domain 2	0.374322	0.011564	Down	-1.41764696359554

	(PYROXD2)				
<i>IFI44</i>	Interferon induced protein 44 (IFI44)	0.196773	0.011776	Down	-2.34539284915082
<i>CD37</i>	CD37 molecule (CD37)	0.256038	0.011801	Down	-1.96556903151261
<i>AMFR</i>	Autocrine motility factor receptor (AMFR)	0.392558	0.012009	Down	-1.34902103074213
<i>APRT</i>	Adenine phosphoribosyltransferase (APRT)	0.288137	0.012009	Down	-1.79517483038164
<i>CD36</i>	CD36 molecule (CD36)	0.403608	0.012009	Down	-1.30897221663961
<i>RNF125</i>	Ring finger protein 125 (RNF125)	0.412845	0.012162	Down	-1.27632873539985
<i>BTG2</i>	BTG anti-proliferation factor 2 (BTG2)	0.344451	0.012191	Down	-1.53762855077349
<i>HMOX1</i>	Heme oxygenase 1 (HMOX1)	0.200294	0.01226	Down	-2.31981245585006
<i>MCL1</i>	BCL2 family apoptosis regulator (MCL1)	0.386595	0.012336	Down	-1.37110550245966
<i>TTC30B</i>	Tetratricopeptide repeat domain 30B (TTC30B)	0.281796	0.01244	Down	-1.82727659697758
<i>ADGRE5</i>	Adhesion G protein-coupled receptor E5 (ADGRE5)	0.205088	0.012616	Down	-2.28568742272948
<i>VCAM1</i>	Vinculin (VCL)	0.205088	0.012616	Down	-2.28568742272948
<i>AMACR</i>	Alpha-methylacyl-coa racemase (AMACR)	0.382038	0.012847	Down	-1.3882104130953
<i>GCGR</i>	Glucagon receptor (GCGR)	0.441132	0.012938	Down	-1.18071895683391
<i>GUSB</i>	Glucuronidase beta (GUSB)	0.476901	0.012938	Down	-1.06823979606064
<i>RNF149</i>	Ring finger protein 149 (RNF149)	0.384321	0.013191	Down	-1.37961665829356
<i>ACSL1</i>	Acyl-coa synthetase long-chain family member 1 (ACSL1)	0.203539	0.014013	Down	-2.29662386915358
<i>APEX1</i>	Apurinic/aprimidinic endodeoxyribonuclease 1 (APEX1)	0.473937	0.01423	Down	-1.07723243205191
<i>BAX</i>	BCL2 associated X, apoptosis regulator (BAX)	0.30827	0.014299	Down	-1.6977346154204
<i>DEDD2</i>	Death effector domain containing 2 (DEDD2)	0.23246	0.014797	Down	-2.10494392562999
<i>ARX</i>	Homeobox protein ARX (ARX)	0.4771	0.015012	Down	-1.06763733571787
<i>FOS</i>	Fos proto-oncogene, AP-1 transcription factor subunit (FOS)	0.453851	0.015387	Down	-1.13970834902294
<i>APPL2</i>	Adaptor protein, phosphotyrosine interacting with PH domain and leucine zipper 2 (APPL2)	0.300037	0.015655	Down	-1.73678718054495
<i>SSBP3</i>	Single stranded DNA binding protein 3 (SSBP3)	0.46184	0.015694	Down	-1.11453554311657
<i>ABCD3</i>	ATP binding cassette subfamily D	0.117268	0.015975	Down	-3.09211482697152

	member 3 (ABCD3)				
<i>EPRS</i>	Glutamyl-prolyl-trna synthetase (EPRS)	0.437249	0.01609	Down	-1.1934731033109
<i>CEBPE</i>	CCAAT/enhancer binding protein epsilon (CEBPE)	0.131424	0.016168	Down	-2.92769658909993
<i>TIMP2</i>	TIMP metalloproteinase inhibitor 2 (TIMP2)	0.160078	0.016305	Down	-2.64315208897071
<i>CCL5</i>	C-C motif chemokine ligand 5 (CCL5)	0.4171	0.016547	Down	-1.26153432986599
<i>SEC11A</i>	SEC11 homolog A, signal peptidase complex subunit (SEC11A)	0.225316	0.016693	Down	-2.14997533119193
<i>SGK3</i>	Serum/glucocorticoid regulated kinase family member 3 (SGK3)	0.171849	0.016693	Down	-2.54078297965329
<i>STK17A</i>	Serine/threonine kinase 17a (STK17A)	0.262919	0.016693	Down	-1.92730911686517
<i>ZNF526</i>	Zinc finger protein 526 (ZNF526)	0.258071	0.016976	Down	-1.95416154055854
<i>SLC11A1</i>	Solute carrier family 11 member 1 (SLC11A1)	0.439126	0.017066	Down	-1.18729208327672
<i>GM2A</i>	GM2 ganglioside activator (GM2A)	0.298967	0.017215	Down	-1.74194010115139
<i>GNB2</i>	G protein subunit beta 2 (GNB2)	0.287401	0.017713	Down	-1.79886076269301
<i>ABCC5</i>	ATP binding cassette subfamily C member 5 (ABCC5)	0.15697	0.017737	Down	-2.67144111203055
<i>BST1</i>	Bone marrow stromal cell antigen 1 (BST1)	0.433522	0.017737	Down	-1.20582312422695
<i>COL22A1</i>	Collagen type XXII alpha 1 chain (COL22A1)	0.134185	0.017737	Down	-2.89770411946643
<i>MRPS21</i>	Mitochondrial ribosomal protein S21 (MRPS21)	0.43336	0.018228	Down	-1.20636346256048
<i>JUN</i>	Jun proto-oncogene, AP-1 transcription factor subunit (JUN)	0.421648	0.018547	Down	-1.24588761080898
<i>MRPS16</i>	Mitochondrial ribosomal protein S16 (MRPS16)	0.397529	0.018652	Down	-1.33086827066163
<i>H6PD</i>	Hexose-6-phosphate dehydrogenase/glucose 1-dehydrogenase (H6PD)	0.451222	0.01872	Down	-1.14809225415312
<i>SUSD3</i>	Sushi domain containing 3 (SUSD3)	0.421165	0.019245	Down	-1.24754220941413
<i>ACP6</i>	Acid phosphatase 6, lysophosphatidic (ACP6)	0.127946	0.019514	Down	-2.9663874766042
<i>ATP13A1</i>	ATPase 13A1 (ATP13A1)	0.366801	0.019614	Down	-1.44692964720246
<i>CNST</i>	Consortin, connexin sorting protein (CNST)	0.446381	0.019805	Down	-1.16365297876273
<i>PSMB2</i>	Proteasome subunit beta 2 (PSMB2)	0.472044	0.020047	Down	-1.08300592018283
<i>MRPL47</i>	Mitochondrial ribosomal protein L47	0.495315	0.020265	Down	-1.01358090234372

	(MRPL47)				
<i>NDUFS4</i>	NADH:ubiquinone oxidoreductase subunit S4 (NDUFS4)	0.457919	0.020712	Down	-1.12683456170715
<i>SYNJ1</i>	Synaptojanin 1 (SYNJ1)	0.257584	0.020733	Down	-1.95688687233104
<i>BCL3</i>	B-cell CLL/lymphoma 3 (BCL3)	0.441246	0.020884	Down	-1.18034463620965
<i>QDPR</i>	Quinoid dihydropteridine reductase (QDPR)	0.4598	0.020919	Down	-1.1209208592117
<i>GGT1</i>	Gamma-glutamyltransferase 1 (GGT1)	0.235925	0.021477	Down	-2.08360013478844
<i>MOB3C</i>	MOB kinase activator 3C (MOB3C)	0.441834	0.021593	Down	-1.17842249722986
<i>TMEM33</i>	Transmembrane protein 33 (TMEM33)	0.497871	0.021593	Down	-1.00615565368683
<i>ESD</i>	Esterase D (ESD)	0.404083	0.022265	Down	-1.30727517178878
<i>ATF5</i>	Activating transcription factor 5 (ATF5)	0.401721	0.02227	Down	-1.31573532104494
<i>GIN54</i>	GIN5 complex subunit 4 (GIN54)	0.459938	0.022978	Down	-1.120488065413
<i>ZFP90</i>	ZFP90 zinc finger protein (ZFP90)	0.218886	0.023166	Down	-2.19175075249031
<i>DHRS4-AS1</i>	DHRS4 antisense RNA 1 (DHRS4-AS1)	0.324644	0.023295	Down	-1.62307149265557
<i>IFI44L</i>	Interferon induced protein 44 like (IFI44L)	0.492977	0.023733	Down	-1.0204082005812
<i>WNT5A</i>	Wnt family member 5A (WNT5A)	0.175597	0.02395	Down	-2.50965784710457
<i>CD74</i>	CD74 molecule (CD74)	0.212521	0.024055	Down	-2.23432389609023
<i>LRFN5</i>	Leucine rich repeat and fibronectin type III domain containing 5 (LRFN5)	0.339256	0.02419	Down	-1.55955276864456
<i>PYCARD</i>	PYD and CARD domain containing (PYCARD)	0.413473	0.024392	Down	-1.27413426807997
<i>RPS6KA3</i>	Ribosomal protein S6 kinase A3 (RPS6KA3)	0.411874	0.024793	Down	-1.27972578771548
<i>SPATS2</i>	Spermatogenesis associated serine rich 2 (SPATS2)	0.483947	0.024889	Down	-1.04707829995239
<i>ABCC6</i>	ATP binding cassette subfamily C member 6 (ABCC6)	0.10836	0.025524	Down	-3.20609329759189
<i>NR4A3</i>	Nuclear receptor subfamily 4 group A member 3 (NR4A3)	0.33352	0.026006	Down	-1.58415373027298
<i>SUSD6</i>	Sushi domain containing 6 (SUSD6)	0.151791	0.026657	Down	-2.71984098082688
<i>GAS5</i>	Growth arrest specific 5 (non-protein coding) (GAS5)	0.469714	0.026681	Down	-1.09014470140237
<i>SGPL1</i>	Sphingosine-1-phosphate lyase 1 (SGPL1)	0.189685	0.027063	Down	-2.39832501232111
<i>SHMT2</i>	Serine hydroxymethyltransferase 2	0.13107	0.027075	Down	-2.93159340003601

	(SHMT2)				
<i>ACSL5</i>	Acyl-coa synthetase long-chain family member 5 (ACSL5)	0.183011	0.027335	Down	-2.44999853020336
<i>CASP8AP2</i>	Caspase 8 associated protein 2 (CASP8AP2)	0.14763	0.027345	Down	-2.75994210480518
<i>TNFRSF1A</i>	TNF receptor superfamily member 1A (TNFRSF1A)	0.254188	0.02767	Down	-1.97603030039575
<i>HSD17B10</i>	Hydroxysteroid 17-beta dehydrogenase 10 (HSD17B10)	0.198238	0.027939	Down	-2.33469509861987
<i>MDH2</i>	Malate dehydrogenase 2 (MDH2)	0.137174	0.027983	Down	-2.86591968789743
<i>BCAS2</i>	Breast carcinoma amplified sequence 2 (BCAS2)	0.33076	0.028165	Down	-1.59614207308533
<i>SWSAP1</i>	SWIM-type zinc finger 7 associated protein 1 (SWSAP1)	0.485266	0.028191	Down	-1.04315312078812
<i>AMD1</i>	Adenosylmethionine decarboxylase 1 (AMD1)	0.37288	0.028297	Down	-1.42321627058969
<i>BTBD3</i>	BTB domain containing 3 (BTBD3)	0.484806	0.028297	Down	-1.04452123894897
<i>CEP152</i>	Centrosomal protein 152 (CEP152)	0.329904	0.028596	Down	-1.59988059511716
<i>MYDGF</i>	Myeloid derived growth factor (MYDGF)	0.375556	0.028603	Down	-1.41290112446133
<i>SS18</i>	SS18, nbaf chromatin remodeling complex subunit (SS18)	0.418003	0.028689	Down	-1.2584141337202
<i>RAP2C</i>	RAP2C, member of RAS oncogene family (RAP2C)	0.459913	0.028723	Down	-1.12056719946245
<i>RTN1</i>	Reticulon 1 (RTN1)	0.105922	0.028872	Down	-3.23892930105565
<i>ATP13A2</i>	Atpase 13A2 (ATP13A2)	0.493645	0.028958	Down	-1.01845558720029
<i>DECR1</i>	2,4-dienoyl-coa reductase 1, mitochondrial (DECR1)	0.225222	0.028958	Down	-2.15058333408522
<i>ARHGAP19</i>	Rho gtpase activating protein 19 (ARHGAP19)	0.499677	0.029138	Down	-1.00093206728689
<i>RFX3</i>	Regulatory factor X3 (RFX3)	0.30335	0.029397	Down	-1.72094466307882
<i>CLIP2</i>	CAP-Gly domain containing linker protein 2 (CLIP2)	0.450726	0.029634	Down	-1.14967593392736
<i>TNF</i>	Tumor necrosis factor (TNF)	0.220884	0.030238	Down	-2.17863885192348
<i>BTF3</i>	Basic transcription factor 3 (BTF3)	0.294716	0.030313	Down	-1.76260062783394
<i>ZFP82</i>	ZFP82 zinc finger protein (ZFP82)	0.013043	0.030666	Down	-6.26060499646424
<i>CASP6</i>	Caspase 6 (CASP6)	0.261295	0.031008	Down	-1.93625041539271
<i>CASKIN2</i>	CASK interacting protein 2 (CASKIN2)	0.312619	0.031316	Down	-1.677523512121
<i>CASP5</i>	Caspase 5 (CASP5)	0.312619	0.031316	Down	-1.677523512121
<i>HSPB11</i>	Heat shock protein family B (small)	0.46708	0.031569	Down	-1.09825993276738

	member 11 (HSPB11)				
<i>TLE1</i>	Transducin like enhancer of split 1 (TLE1)	0.295349	0.03162	Down	-1.75950911802577
<i>FIBP</i>	FGF1 intracellular binding protein (FIBP)	0.25183	0.031871	Down	-1.98947589746674
<i>BBX</i>	BBX, HMG-box containing (BBX)	0.489135	0.032434	Down	-1.03169586748718
<i>FN3KRP</i>	Fructosamine 3 kinase related protein (FN3KRP)	0.275515	0.032434	Down	-1.85979569097923
<i>GATA2</i>	GATA binding protein 2 (GATA2)	0.39842	0.032434	Down	-1.32763956660141
<i>HPCAL1</i>	Hippocalcin like 1 (HPCAL1)	0.223592	0.032434	Down	-2.16105727737362
<i>DECR2</i>	2,4-dienoyl-coa reductase 2, peroxisomal (DECR2)	0.224637	0.03288	Down	-2.15433535453026
<i>MAPKAPK3</i>	Mitogen-activated protein kinase-activated protein kinase 3 (MAPKAPK3)	0.173585	0.032914	Down	-2.52628453302356
<i>MMP12</i>	Matrix metalloproteinase 12 (MMP12)	0.437783	0.033051	Down	-1.19171240165012
<i>SRRD</i>	SRR1 domain containing (SRRD)	0.432597	0.033131	Down	-1.20890301633441
<i>CEBPB</i>	CCAAT/enhancer binding protein beta (CEBPB)	0.340592	0.033523	Down	-1.55388402805672
<i>SERF2</i>	Small EDRK-rich factor 2 (SERF2)	0.476969	0.034027	Down	-1.06803297921839
<i>MRPL51</i>	Mitochondrial ribosomal protein L51 (MRPL51)	0.319471	0.034446	Down	-1.6462437963816
<i>WNT5B</i>	Wnt family member 5B (WNT5B)	0.206035	0.034588	Down	-2.27903761050572
<i>ZFP36L1</i>	ZFP36 ring finger protein like 1 (ZFP36L1)	0.446796	0.035236	Down	-1.16231228610235
<i>TMEM154</i>	Transmembrane protein 154 (TMEM154)	0.486085	0.035701	Down	-1.04072008923988
<i>TIMMDC1</i>	Translocase of inner mitochondrial membrane domain containing 1 (TIMMDC1)	0.301459	0.036128	Down	-1.72996548174295
<i>MAPK14</i>	Mitogen-activated protein kinase 14 (MAPK14)	0.341487	0.037229	Down	-1.55009694523888
<i>PCK2</i>	Phosphoenolpyruvate carboxykinase 2, mitochondrial (PCK2)	0.475608	0.037229	Down	-1.07215625748255
<i>REXO2</i>	RNA exonuclease 2 (REXO2)	0.302028	0.037229	Down	-1.72724610815858
<i>RPS6KA5</i>	Ribosomal protein S6 kinase A5 (RPS6KA5)	0.097008	0.037776	Down	-3.36574773485338
<i>ANXA11</i>	Annexin A11 (ANXA11)	0.34224	0.038461	Down	-1.54691821026181
<i>CCDC137</i>	Coiled-coil domain containing 137 (CCDC137)	0.471144	0.038968	Down	-1.08575882770623
<i>SGTA</i>	Small glutamine rich	0.26584	0.039031	Down	-1.9113715556345

	tetratricopeptide repeat containing alpha (SGTA)				
<i>NNT</i>	Nicotinamide nucleotide transhydrogenase (NNT)	0.386088	0.039149	Down	-1.37299801846463
<i>PLIN2</i>	Perilipin 2 (PLIN2)	0.155267	0.039258	Down	-2.68718033693769
<i>SERPINE2</i>	Serpin family E member 2 (SERPINE2)	0.33663	0.040087	Down	-1.57076527713655
<i>TNFRSF10B</i>	TNF receptor superfamily member 10b (TNFRSF10B)	0.178036	0.040694	Down	-2.48976112741001
<i>MMS19</i>	MMS19 homolog, cytosolic iron-sulfur assembly component (MMS19)	0.207353	0.041112	Down	-2.26983726235119
<i>NABP2</i>	Nucleic acid binding protein 2 (NABP2)	0.292516	0.041489	Down	-1.7734123981663
<i>AIP</i>	Aryl hydrocarbon receptor interacting protein (AIP)	0.361614	0.041875	Down	-1.46747650209387
<i>MDM1</i>	Mdm1 nuclear protein (MDM1)	0.300233	0.042163	Down	-1.73584652457589
<i>ARHGAP15</i>	Rho gtpase activating protein 15 (ARHGAP15)	0.425878	0.042299	Down	-1.23148639657444
<i>TNFAIP6</i>	TNF alpha induced protein 6 (TNFAIP6)	0.096553	0.042574	Down	-3.3725390318762
<i>MAPK3</i>	Mitogen-activated protein kinase 3 (MAPK3)	0.344589	0.042633	Down	-1.53705325075086
<i>MGST1</i>	Microsomal glutathione S-transferase 1 (MGST1)	0.164152	0.042633	Down	-2.60689276986796
<i>FMR1</i>	Fragile X mental retardation 1 (FMR1)	0.26138	0.04271	Down	-1.93578013597716
<i>RTKN</i>	Rhotekin (RTKN)	0.139086	0.04283	Down	-2.84594617446536
<i>IFI27</i>	Interferon alpha inducible protein 27 (IFI27)	0.368804	0.042833	Down	-1.43907452190751
<i>MDH1</i>	Malate dehydrogenase 1 (MDH1)	0.441596	0.043555	Down	-1.17920181638318
<i>TNFAIP8L2</i>	TNF alpha induced protein 8 like 2 (TNFAIP8L2)	0.103785	0.043559	Down	-3.2683241042685
<i>SEC22C</i>	SEC22 homolog C, vesicle trafficking protein (SEC22C)	0.290517	0.044415	Down	-1.78330502825257
<i>INHBA</i>	Inhibin beta A subunit (INHBA)	0.419472	0.044433	Down	-1.25335300854801
<i>BAG2</i>	BCL2 associated athanogene 2 (BAG2)	0.422167	0.044469	Down	-1.24411507671142
<i>PLP2</i>	Proteolipid protein 2 (PLP2)	0.117831	0.044517	Down	-3.08521349958641
<i>RPLP2</i>	Ribosomal protein lateral stalk subunit P2 (RPLP2)	0.495865	0.045859	Down	-1.01197982127802
<i>SLC4A1AP</i>	Solute carrier family 4 member 1 adaptor protein (SLC4A1AP)	0.486859	0.047381	Down	-1.03842486885343

<i>BCL2A1</i>	BCL2 related protein A1 (BCL2A1)	0.495893	0.047422	Down	-1.01190027040199
<i>DYNLL2</i>	Dynein light chain LC8-type 2 (DYNLL2)	0.490461	0.047541	Down	-1.02778995805398
<i>VAT1</i>	Vesicle amine transport 1 (VAT1)	0.29596	0.047561	Down	-1.75652365252489
<i>NFKBIZ</i>	NFKB inhibitor zeta (NFKBIZ)	0.107594	0.048323	Down	-3.21633320562315
<i>PSMB3</i>	Proteasome subunit beta 3 (PSMB3)	0.429967	0.048483	Down	-1.21770239823215
<i>ETV3</i>	ETS variant 3 (ETV3)	0.489678	0.048524	Down	-1.03009512896629
<i>SLCO4C1</i>	Solute carrier organic anion transporter family member 4C1 (SLCO4C1)	0.268293	0.048881	Down	-1.89811943305539
<i>MCM5</i>	Minichromosome maintenance complex component 5 (MCM5)	2.460717	2.56E-05	Up	1.29907871969438
<i>CHD1</i>	Chromodomain helicase DNA binding protein 1 (CHD1)	29.05109	5.37E-05	Up	4.86052034709947
<i>RRAS</i>	Related RAS viral (r-ras) oncogene homolog (RRAS)	17.03109	0.000125	Up	4.09009893152442
<i>PPP1R3C</i>	Protein phosphatase 1 regulatory subunit 3C (PPP1R3C)	10.59362	0.000179	Up	3.40512370310819
<i>S100A4</i>	S100 calcium binding protein A4 (S100A4)	2.49833	0.000215	Up	1.32096419823534
<i>RABAC1</i>	Rab acceptor 1 (RABAC1)	2.438542	0.000249	Up	1.28601875009924
<i>SFT2D2</i>	SFT2 domain containing 2 (SFT2D2)	5.519132	0.00025	Up	2.46444148121132
<i>BCAP31</i>	B-cell receptor-associated protein 31 (BCAP31)	6.445397	0.000256	Up	2.68826928382778
<i>RDH10</i>	Retinol dehydrogenase 10 (all-trans) (RDH10)	3.852719	0.000458	Up	1.94587695417415
<i>FGR</i>	FGR proto-oncogene, Src family tyrosine kinase (FGR)	3.0056	0.000588	Up	1.58765313893079
<i>MCOLN1</i>	Mucopolin 1 (MCOLN1)	2.069423	0.000675	Up	1.04922849553249
<i>TGFBI</i>	Transforming growth factor beta induced (TGFBI)	2.256771	0.000833	Up	1.17426001369083
<i>RXRA</i>	Retinoid X receptor alpha (RXRA)	20.82515	0.000855	Up	4.38025509997825
<i>BARX1</i>	BARX homeobox 1 (BARX1)	7.342598	0.000886	Up	2.87629060859988
<i>FLII</i>	FLII, actin remodeling protein (FLII)	3.13622	0.00097	Up	1.64902676350938
<i>MVP</i>	Major vault protein (MVP)	2.45446	0.001033	Up	1.29540554714892
<i>SRXN1</i>	Sulfiredoxin 1 (SRXN1)	2.065883	0.001033	Up	1.04675845736756
<i>BST2</i>	Bone marrow stromal cell antigen 2 (BST2)	4.478535	0.001078	Up	2.16302681881559
<i>DUSP10</i>	Dual specificity phosphatase 10 (DUSP10)	2.988686	0.001078	Up	1.57951140747289
<i>BDH2</i>	3-hydroxybutyrate dehydrogenase,	3.972963	0.00108	Up	1.99021532398603

	type 2 (BDH2)				
<i>ZNF232</i>	Zinc finger protein 232 (ZNF232)	4.805476	0.001202	Up	2.26467925774683
<i>ALDH18A1</i>	Aldehyde dehydrogenase 18 family member A1 (ALDH18A1)	2.206169	0.001292	Up	1.14154328178482
<i>CLDND1</i>	Claudin domain containing 1 (CLDND1)	2.530029	0.001426	Up	1.33915412934356
<i>BTA1</i>	B-TFIID TATA-box binding protein associated factor 1 (BTA1)	4.66286	0.001468	Up	2.22121517819349
<i>APPBP2</i>	Amyloid beta precursor protein binding protein 2 (APPBP2)	3.575281	0.001527	Up	1.83805677595912
<i>BIRC6</i>	Baculoviral IAP repeat containing 6 (BIRC6)	7.530771	0.001527	Up	2.91279763724746
<i>CBS</i>	Cystathionine-beta-synthase (CBS)	3.576224	0.001626	Up	1.83843713359656
<i>RFC1</i>	Replication factor C subunit 1 (RFC1)	3.065948	0.001685	Up	1.61633321324524
<i>ABHD5</i>	Abhydrolase domain containing 5 (ABHD5)	2.059414	0.001738	Up	1.04223402571453
<i>RAB12</i>	RAB12, member RAS oncogene family (RAB12)	3.615714	0.001968	Up	1.85428054081258
<i>MAPK13</i>	Mitogen-activated protein kinase 13 (MAPK13)	5.141567	0.002194	Up	2.36220800797425
<i>UPF1</i>	UPF1, RNA helicase and atpase (UPF1)	3.159737	0.002582	Up	1.65980452506646
<i>ANXA4</i>	Annexin A4 (ANXA4)	2.984159	0.00263	Up	1.57732434968142
<i>GSTK1</i>	Glutathione S-transferase kappa 1 (GSTK1)	2.023276	0.00263	Up	1.01669283676643
<i>ZFP41</i>	ZFP41 zinc finger protein (ZFP41)	2.726841	0.002876	Up	1.44723057745992
<i>ANXA1</i>	Annexin A1 (ANXA1)	3.69227	0.002897	Up	1.88450791402192
<i>BLMH</i>	Bleomycin hydrolase (BLMH)	7.882266	0.002951	Up	2.97861042065625
<i>XK</i>	X-linked Kx blood group (XK)	2.99525	0.003177	Up	1.58267631112142
<i>TRIP10</i>	Thyroid hormone receptor interactor 10 (TRIP10)	3.107641	0.003341	Up	1.63582007206722
<i>SCARB1</i>	Scavenger receptor class B member 1 (SCARB1)	3.400353	0.003376	Up	1.76568439581327
<i>RDH11</i>	Retinol dehydrogenase 11 (all-trans/9-cis/11-cis) (RDH11)	2.442396	0.003448	Up	1.288297329069
<i>RELB</i>	RELB proto-oncogene, NF-kb subunit (RELB)	2.265072	0.00405	Up	1.17955696624087
<i>C1QBP</i>	Complement C1q binding protein (C1QBP)	3.213082	0.004087	Up	1.68395777660885
<i>BMP6</i>	Bone morphogenetic protein 6 (BMP6)	2.689124	0.004246	Up	1.42713654652282

<i>SLC38A1</i>	Solute carrier family 38 member 1 (SLC38A1)	2.303518	0.004264	Up	1.20383890223068
<i>SCAP</i>	SREBF chaperone (SCAP)	2.484759	0.005131	Up	1.31310603995849
<i>ARHGAP17</i>	Rho gtpase activating protein 17 (ARHGAP17)	2.440594	0.005424	Up	1.28723254432734
<i>BLOC1S1</i>	Biogenesis of lysosomal organelles complex 1 subunit 1 (BLOC1S1)	8.469387	0.005424	Up	3.08225757372448
<i>ACSL4</i>	Acyl-coa synthetase long-chain family member 3 (ACSL3)	3.335729	0.005441	Up	1.73800212437695
<i>PRDX5</i>	Peroxiredoxin 5 (PRDX5)	2.480733	0.005555	Up	1.31076626188354
<i>SNHG17</i>	Small nucleolar RNA host gene 17 (SNHG17)	5.532975	0.005555	Up	2.4680553803283
<i>ARHGEF6</i>	Rac/Cdc42 guanine nucleotide exchange factor 6 (ARHGEF6)	2.629552	0.005783	Up	1.39481707723323
<i>SULT1A1</i>	Sulfotransferase family 1A member 1 (SULT1A1)	957.0319	0.005926	Up	9.9024232165603
<i>ATP6V1G1</i>	Atpase H+ transporting V1 subunit G1 (ATP6V1G1)	6.382259	0.006471	Up	2.67406720354264
<i>CARD10</i>	Caspase recruitment domain family member 10 (CARD10)	2.346446	0.006587	Up	1.23047729791581
<i>ATP2B4</i>	Atpase plasma membrane Ca2+ transporting 4 (ATP2B4)	6.203625	0.006671	Up	2.63311143133583
<i>FEZ1</i>	Fasciculation and elongation protein zeta 1 (FEZ1)	2.965216	0.006673	Up	1.56813717438905
<i>SNX2</i>	Sorting nexin 2 (SNX2)	956.5702	0.006895	Up	9.90172703258401
<i>RPS5</i>	Ribosomal protein S5 (RPS5)	780.7456	0.00704	Up	9.60870880310621
<i>SLC15A3</i>	Solute carrier family 15 member 3 (SLC15A3)	1171.846	0.007574	Up	10.1945672420669
<i>SSBP2</i>	Single stranded DNA binding protein 2 (SSBP2)	2.005621	0.007609	Up	1.00404909029477
<i>ALAD</i>	Aminolevulinatase (ALAD)	3.59024	0.007642	Up	1.84408013711823
<i>ARHGDIB</i>	Rho GDP dissociation inhibitor beta (ARHGDIB)	2.171898	0.007691	Up	1.11895650552667
<i>ARL4D</i>	ADP ribosylation factor like gtpase 4D (ARL4D)	5.47837	0.007823	Up	2.45374668674348
<i>SERPINE1</i>	Serpin family E member 1 (SERPINE1)	2.668163	0.008252	Up	1.41584673266114
<i>CHCHD10</i>	Coiled-coil-helix-coiled-coil-helix domain containing 10 (CHCHD10)	4.023465	0.008432	Up	2.00843838804606
<i>SEMA4A</i>	Semaphorin 4A (SEMA4A)	741.7528	0.00851	Up	9.53479470725904
<i>ARHGEF7</i>	Cdc42 guanine nucleotide exchange factor 7 (ARHGEF7)	2.104701	0.008848	Up	1.07361532301649

<i>VASH1</i>	Vasohibin 1 (VASH1)	2.033512	0.008882	Up	1.02397321496112
<i>PLXNB2</i>	Plexin B2 (PLXNB2)	3.543013	0.009094	Up	1.82497689481513
<i>RAB11FIP4</i>	RAB11 family interacting protein 4 (RAB11FIP4)	2.109573	0.009094	Up	1.07695077865471
<i>AIFM1</i>	Apoptosis inducing factor, mitochondria associated 1 (AIFM1)	2.161566	0.009254	Up	1.11207668608375
<i>AQP3</i>	Aquaporin 3 (Gill blood group) (AQP3)	7.526977	0.009254	Up	2.91207053746756
<i>SCYL2</i>	SCY1 like pseudokinase 2 (SCYL2)	2.196832	0.009634	Up	1.13542463940849
<i>TTC31</i>	Tetratricopeptide repeat domain 31 (TTC31)	3.040682	0.009634	Up	1.60439503147379
<i>BIRC3</i>	Baculoviral IAP repeat containing 3 (BIRC3)	2.180503	0.009657	Up	1.12466105931386
<i>MT1E</i>	Metallothionein 1E (MT1E)	2.506391	0.009792	Up	1.32561121492606
<i>ATF6B</i>	Activating transcription factor 6 beta (ATF6B)	2.002499	0.010008	Up	1.00180150607529
<i>SLC7A1</i>	Solute carrier family 7 member 1 (SLC7A1)	764.8843	0.010149	Up	9.57909766783645
<i>XBP1</i>	X-box binding protein 1 (XBP1)	2.29585	0.010207	Up	1.19902863421654
<i>TIMP1</i>	TIMP metalloproteinase inhibitor 1 (TIMP1)	2.239681	0.010295	Up	1.16329332267798
<i>RAB17</i>	RAB17, member RAS oncogene family (RAB17)	2.096672	0.010433	Up	1.06810121117799
<i>EIF4E2</i>	Eukaryotic translation initiation factor 4E family member 2 (EIF4E2)	2.19624	0.010456	Up	1.13503565867278
<i>PIK3CD</i>	Phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit delta (PIK3CD)	2.931655	0.01049	Up	1.55171551523998
<i>C5</i>	Complement C5 (C5)	2.559031	0.010667	Up	1.35559739437978
<i>ALAS1</i>	5'-aminolevulinate synthase 1 (ALAS1)	4.159557	0.010794	Up	2.05642975099555
<i>BNIP2</i>	BCL2 interacting protein 2 (BNIP2)	2.174546	0.01122	Up	1.1207139677456
<i>TRIP12</i>	Thyroid hormone receptor interactor 12 (TRIP12)	2.477913	0.011696	Up	1.309125351955
<i>EIF3A</i>	Eukaryotic translation initiation factor 3 subunit A (EIF3A)	2.202794	0.011748	Up	1.13933427570254
<i>LRRC8D</i>	Leucine rich repeat containing 8 family member D (LRRC8D)	2.522693	0.011842	Up	1.33496477641277
<i>S100A8</i>	S100 calcium binding protein A8 (S100A8)	2.969624	0.011885	Up	1.57028032814517
<i>RAB1A</i>	RAB1A, member RAS oncogene family (RAB1A)	3.037221	0.011918	Up	1.60275180294907

<i>LYPLAL1</i>	Lysophospholipase like 1 (LYPLAL1)	2.886975	0.013018	Up	1.52955872446849
<i>PSMB9</i>	Proteasome subunit beta 9 (PSMB9)	2.187528	0.013447	Up	1.1293012756571
<i>MT1G</i>	Metallothionein 1G (MT1G)	3.246395	0.014783	Up	1.69883859763734
<i>EVL</i>	Enah/Vasp-like (EVL)	2.169377	0.015364	Up	1.11728066000685
<i>PPAN</i>	Peter pan homolog (Drosophila) (PPAN)	2.414493	0.015499	Up	1.27172036553732
<i>DNAJB6</i>	Dnaj heat shock protein family (Hsp40) member B6 (DNAJB6)	4.004309	0.015956	Up	2.00155344887499
<i>HOXA1</i>	Homeobox A1 (HOXA1)	2.467889	0.016146	Up	1.30327758582032
<i>CCL2</i>	C-C motif chemokine ligand 2 (CCL2)	2.287645	0.016404	Up	1.19386305670815
<i>ARHGAP18</i>	Rho gtpase activating protein 18 (ARHGAP18)	2.903636	0.016465	Up	1.53786043120918
<i>HNRNPA3</i>	Heterogeneous nuclear ribonucleoprotein A3 (HNRNPA3)	2.060602	0.016487	Up	1.04306615900996
<i>TMSB15B</i>	Thymosin beta 15B (TMSB15B)	3.265602	0.016586	Up	1.70734918206205
<i>CALM2</i>	Calmodulin 2 (CALM2)	2.809852	0.016914	Up	1.49049435469612
<i>DCAF4</i>	DDB1 and CUL4 associated factor 4 (DCAF4)	2.056053	0.017321	Up	1.03987769844606
<i>GSTZ1</i>	Glutathione S-transferase zeta 1 (GSTZ1)	2.094683	0.017578	Up	1.06673213260081
<i>CPT1A</i>	Carnitine palmitoyltransferase 1A (CPT1A)	3.370538	0.017591	Up	1.75297871650619
<i>ALDOC</i>	Aldolase, fructose-bisphosphate C (ALDOC)	2.301985	0.017676	Up	1.20287847613925
<i>ANTXR2</i>	Anthrax toxin receptor 2 (ANTXR2)	2.528869	0.017737	Up	1.33849233802937
<i>SAT1</i>	Spermidine/spermine N1-acetyltransferase 1 (SAT1)	2.607273	0.017742	Up	1.38254192268851
<i>CAPN1</i>	Calpain 1 (CAPN1)	2.62357	0.017747	Up	1.39153133738044
<i>MRPL41</i>	Mitochondrial ribosomal protein L41 (MRPL41)	2.313136	0.017938	Up	1.20985005690798
<i>C11orf1</i>	Chromosome 11 open reading frame 1 (c11orf1)	3.024776	0.018645	Up	1.59682820525773
<i>RB1</i>	RB transcriptional corepressor 1 (RB1)	2.261753	0.018652	Up	1.17744120688731
<i>ZNF136</i>	Zinc finger protein 136 (ZNF136)	6.919398	0.018684	Up	2.79064651207112
<i>ATP2B1</i>	Atpase plasma membrane Ca ²⁺ transporting 1 (ATP2B1)	2.173773	0.019614	Up	1.12020147616217
<i>PSMB8</i>	Proteasome subunit beta 8 (PSMB8)	2.377511	0.020265	Up	1.24945175713236
<i>ZNF654</i>	Zinc finger protein 654 (ZNF654)	3.58426	0.020353	Up	1.84167517319104
<i>RFK</i>	Riboflavin kinase (RFK)	2.578789	0.020397	Up	1.36669397174003
<i>CAPN3</i>	Calpain 3 (CAPN3)	2.026223	0.02047	Up	1.01879292560535

<i>ATP6V1C2</i>	Atpase H+ transporting V2 subunit C1 (ATP6V1C2)	2.291425	0.02103	Up	1.19624526651751
<i>CCL4</i>	C-C motif chemokine ligand 4 (CCL4)	5.905834	0.021212	Up	2.56214088997469
<i>XPO7</i>	Exportin 7 (XPO7)	2.809974	0.02191	Up	1.49055663359645
<i>SESN2</i>	Sestrin 2 (SESN2)	3.371659	0.022271	Up	1.75345884597812
<i>SNX16</i>	Sorting nexin 16 (SNX16)	100.4267	0.022769	Up	6.64999872256894
<i>SEC22B</i>	SEC22 homolog B, vesicle trafficking protein (gene/pseudogene) (SEC22B)	83.10486	0.023329	Up	6.37686088703062
<i>ALG13</i>	ALG13, UDP-N-acetylglucosaminyltransferase subunit (ALG13)	2.818721	0.024171	Up	1.49504061586146
<i>BLOC1S2</i>	Biogenesis of lysosomal organelles complex 1 subunit 2 (BLOC1S2)	2.751857	0.024171	Up	1.46040574610714
<i>BMP2</i>	Bone morphogenetic protein 2 (BMP2)	2.751857	0.024171	Up	1.46040574610714
<i>UCP2</i>	Uncoupling protein 2 (UCP2)	3.195687	0.024773	Up	1.67612596942464
<i>SOD2</i>	Superoxide dismutase 2, mitochondrial (SOD2)	2.409601	0.024793	Up	1.26879420639859
<i>RAB27A</i>	RAB27A, member RAS oncogene family (RAB27A)	2.367933	0.024884	Up	1.24362834443324
<i>TGIF2</i>	TGFB induced factor homeobox 2 (TGIF2)	2.254193	0.024889	Up	1.17261079420841
<i>MRPS17</i>	Mitochondrial ribosomal protein S17 (MRPS17)	3.073496	0.024985	Up	1.61988075142671
<i>PTPRC</i>	Protein tyrosine phosphatase, receptor type C (PTPRC)	2.581176	0.025527	Up	1.36802853467048
<i>THBS1</i>	Thrombospondin 1 (THBS1)	220.5489	0.025974	Up	7.78495454907719
<i>UCK1</i>	Uridine-cytidine kinase 1 (UCK1)	2.350056	0.025974	Up	1.2326948837737
<i>MSL3</i>	Male-specific lethal 3 homolog (Drosophila) (MSL3)	2.113278	0.02682	Up	1.07948228101242
<i>CAPN15</i>	Calpain 15 (CAPN15)	3.053003	0.027939	Up	1.610228962661
<i>PLXND1</i>	Plexin D1 (PLXND1)	3.399329	0.028701	Up	1.76525020751887
<i>MMP10</i>	Matrix metalloproteinase 10 (MMP10)	2.321447	0.02871	Up	1.21502408275847
<i>AGT</i>	Angiotensinogen (AGT)	2.134326	0.028941	Up	1.09378079194286
<i>GSK3B</i>	Glycogen synthase kinase 3 beta (GSK3B)	2.637721	0.028958	Up	1.39929184065526
<i>MT1F</i>	Metallothionein 1F (MT1F)	2.500414	0.029439	Up	1.32216700258574
<i>DHRS3</i>	Dehydrogenase/reductase 3 (DHRS3)	4.199784	0.029559	Up	2.07031501729829
<i>SH3BGR</i>	SH3 domain binding glutamate rich	2.303296	0.0296	Up	1.2036998389394

	protein (SH3BGR)				
<i>VNN1</i>	Vanin 1 (VNN1)	2.965651	0.030073	Up	1.56834866954693
<i>PPARD</i>	Peroxisome proliferator activated receptor delta (PPARD)	2.297645	0.030157	Up	1.20015575528191
<i>RAB8B</i>	RAB8B, member RAS oncogene family (RAB8B)	2.96687	0.030388	Up	1.56894165397308
<i>GSTP1</i>	Glutathione S-transferase pi 1 (GSTP1)	6.226805	0.030869	Up	2.63849220081267
<i>PDE4B</i>	Phosphodiesterase 4B (PDE4B)	2.653513	0.030917	Up	1.40790380072083
<i>SATB1</i>	SATB homeobox 1 (SATB1)	2.19923	0.030917	Up	1.13699866243143
<i>TUBB2A</i>	Tubulin beta 2A class iia (TUBB2A)	3.277447	0.031866	Up	1.71257253211667
<i>CAPNS1</i>	Calpain small subunit 1 (CAPNS1)	4.094667	0.032434	Up	2.03374598871625
<i>GSR</i>	Glutathione-disulfide reductase (GSR)	2.069056	0.03288	Up	1.04897243843522
<i>CD52</i>	CD52 molecule (CD52)	2.80719	0.033491	Up	1.48912659509241
<i>PARP9</i>	Poly (ADP-ribose) polymerase family member 9 (PARP9)	2.874169	0.034439	Up	1.52314507598947
<i>RDH14</i>	Retinol dehydrogenase 14 (all-trans/9-cis/11-cis) (RDH14)	3.106303	0.034891	Up	1.63519854038877
<i>GSTM4</i>	Glutathione S-transferase mu 4 (GSTM4)	6.175857	0.035271	Up	2.62663942505949
<i>NT5DC2</i>	5'-nucleotidase domain containing 2 (NT5DC2)	2.189067	0.036128	Up	1.13031628672328
<i>DAAM1</i>	Dishevelled associated activator of morphogenesis 1 (DAAM1)	2.418627	0.036587	Up	1.27418846932614
<i>SERPINF1</i>	Serpin family F member 1 (SERPINF1)	13.36472	0.036904	Up	3.74035749378754
<i>YWHAB</i>	Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein beta (YWHAB)	4.627197	0.036904	Up	2.21013858110331
<i>CCNDBP1</i>	Cyclin D1 binding protein 1 (CCNDBP1)	3.051444	0.037065	Up	1.60949194249663
<i>MARCKSL1</i>	MARCKS like 1 (MARCKSL1)	2.008338	0.037876	Up	1.00600188120826
<i>PTTG1</i>	Pituitary tumor-transforming 1 (PTTG1)	2.602302	0.037876	Up	1.37978858284151
<i>ZNF544</i>	Zinc finger protein 544 (ZNF544)	109.5991	0.037876	Up	6.77609220227142
<i>SAMM50</i>	SAMM50 sorting and assembly machinery component (SAMM50)	2.355166	0.038051	Up	1.23582890140683
<i>CRY1</i>	Cryptochrome circadian clock 1 (CRY1)	3.35685	0.038191	Up	1.74710790922446
<i>ARF5</i>	ADP ribosylation factor 5 (ARF5)	3.883746	0.038492	Up	1.95744870986064

<i>BNIP3</i>	BCL2 interacting protein 3 (BNIP3)	3.632896	0.038796	Up	1.86112020557652
<i>MAST4</i>	Microtubule associated serine/threonine kinase family member 4 (MAST4)	2.621325	0.040913	Up	1.39029623230737
<i>TGFBRAP1</i>	Transforming growth factor beta receptor associated protein 1 (TGFBRAP1)	31.98244	0.041132	Up	4.99920808879988
<i>ICAM1</i>	Intercellular adhesion molecule 1 (ICAM1)	2.333623	0.041222	Up	1.22257143378173
<i>SLC44A2</i>	Solute carrier family 44 member 2 (SLC44A2)	2.652655	0.041291	Up	1.40743687811336
<i>MKKS</i>	Mckusick-Kaufman syndrome (MKKS)	2.156753	0.042163	Up	1.10886099673289
<i>PTDSS2</i>	Phosphatidylserine synthase 2 (PTDSS2)	2.26214	0.042163	Up	1.17768828661961
<i>YWHAQ</i>	Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein theta (YWHAQ)	3.460774	0.042633	Up	1.79109477410568
<i>CCND3</i>	Cyclin D3 (CCND3)	2.127659	0.043192	Up	1.08926673293294
<i>RNF4</i>	Ring finger protein 4 (RNF4)	3.410272	0.04343	Up	1.76988669948127
<i>ZNF236</i>	Zinc finger protein 236 (ZNF236)	2.532463	0.043442	Up	1.34054112912361
<i>ATF3</i>	Activating transcription factor 3 (ATF3)	3.975252	0.0436	Up	1.99104631792174
<i>MPV17L2</i>	MPV17 mitochondrial inner membrane protein like 2 (MPV17L2)	2.316779	0.043627	Up	1.2121201934591
<i>HMGCR</i>	3-hydroxy-3-methylglutaryl-coa reductase (HMGCR)	3.715463	0.043703	Up	1.89354210756873
<i>B2M</i>	Beta-2-microglobulin (B2M)	2.073116	0.043707	Up	1.05180067896256
<i>MT2A</i>	Metallothionein 2A (MT2A)	2.797594	0.043958	Up	1.48418662644923
<i>TAGLN2</i>	Transgelin 2 (TAGLN2)	72.32468	0.043996	Up	6.17641609229071
<i>SESN3</i>	Sestrin 3 (SESN3)	3.049359	0.044182	Up	1.60850603357025
<i>RFC4</i>	Replication factor C subunit 4 (RFC4)	2.049664	0.044299	Up	1.03538755098915
<i>RNMT</i>	RNA guanine-7 methyltransferase (RNMT)	2.348065	0.045822	Up	1.23147207820748
<i>TOMM70</i>	Translocase of outer mitochondrial membrane 70 (TOMM70)	5.749543	0.046153	Up	2.52344723295498
<i>PTPN2</i>	Protein tyrosine phosphatase, non-receptor type 2 (PTPN2)	2.245996	0.046397	Up	1.16735528573833
<i>SESN1</i>	Sestrin 1 (SESN1)	5.128959	0.046397	Up	2.35866601356401
<i>TNIP1</i>	TNFAIP3 interacting protein 1 (TNIP1)	5.216241	0.047006	Up	2.38301046576169

<i>AKTIP</i>	AKT interacting protein (AKTIP)	3.165454	0.047218	Up	1.66241248783602
<i>BCAP29</i>	B-cell receptor associated protein 29 (BCAP29)	2.282072	0.047638	Up	1.19034402195459
<i>MPV17</i>	MPV17, mitochondrial inner membrane protein (MPV17)	3.016697	0.049835	Up	1.59296999408585

DEG, differentially expressed gene; DF, diabetic foot; LOT, local oxygen therapy; FC, fold change.