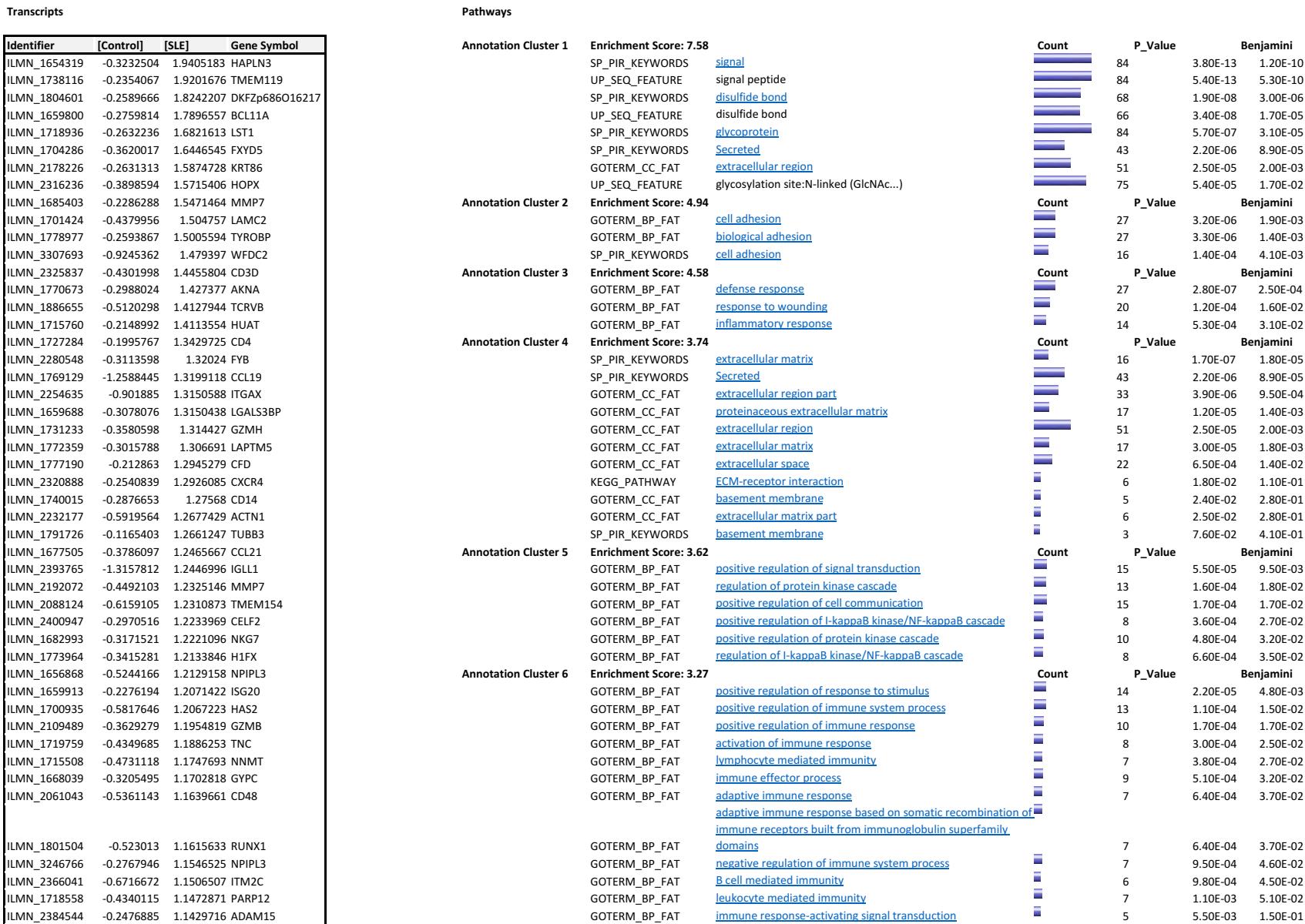


Supplementary Table 3 : Transcriptomic profiling singles out a subgroup of SLE kidney biopsy samples with decreased eGFR

A cluster of SLE kidney biopsy samples, identified by hierarchical clustering algorithm (Pearson-centered algorithm, Ward's linkage rule) is characterized by the overexpression of 271 transcripts (by moderated t test, with Bonferroni correction for multiple comparisons) compared to the other lupus samples, significantly enriched in the indicated pathways.



ILMN_1805737	-0.4868437	1.1419221	PFKP					
ILMN_2114720	-0.2910049	1.1358421	SLPI					
ILMN_1695851	-0.2123577	1.1309191	PARVG					
ILMN_1762594	-0.2364039	1.1272446	NOD2					
ILMN_1758895	-0.5701722	1.1245126	CTSK					
ILMN_1687301	-0.6841173	1.1204166	VCAN					
ILMN_1678827	-0.1769902	1.0991265	SPDYE7P					
ILMN_1695404	-0.2068565	1.0963432	LY6E					
ILMN_1680453	-0.6901841	1.0810174	ITM2C					
ILMN_1747593	-0.5384941	1.079707	ISLR					
ILMN_2387496	-0.6742429	1.0743917	COAS3					
ILMN_1749372	-0.2665476	1.0736879	GGTS					
ILMN_1767556	-0.3998735	1.0715685	C10orf110					
ILMN_1736178	-0.4081671	1.068581	AEBP1					
ILMN_1772218	-0.4511487	1.0665296	HLA-DPA1					
ILMN_2408987	-1.0307062	1.0658907	SMARD3					
ILMN_2376205	-0.7288805	1.0646546	LTB					
ILMN_2376204	-0.3408106	1.0642538	LTB					
ILMN_1750805	-0.318508	1.0515127	ARHGAP30					
ILMN_1752755	-0.7749436	1.049824	VWF					
ILMN_2400935	-0.4563044	1.0462416	TAGLN					
ILMN_1799062	-0.4098382	1.0438011	NFKB2					
ILMN_1769201	-0.4936057	1.0263821	ELF3					
ILMN_1708858	-0.7217799	1.0184444	CSNK1E					
ILMN_1798181	-0.4995381	1.0047315	IRF7					
ILMN_2353202	-0.5386101	1.0010649	PTK7					
ILMN_1803686	-0.3430935	1.0008456	ADA					
ILMN_1653652	-0.3883707	1.0007647	PTPRC					
ILMN_2413779	-0.4982294	0.9999508	SEZL2					
ILMN_1778668	-0.3758617	0.99820423	TAGLN					
ILMN_1744487	-0.5831665	0.9951158	C1QTNF5					
ILMN_2261416	-0.3355521	0.99143887	CD3D					
ILMN_1765649	-0.2809076	0.9906851	IRF3					
ILMN_1745148	-0.4152842	0.9902657	ZNFX1					
ILMN_2117508	-0.4875161	0.9897423	CTHRC1					
ILMN_2125747	-0.2444001	0.9888768	CORO1A					
ILMN_1785005	-0.3391531	0.98682004	NCF4					
ILMN_1717793	-0.4363792	0.9829914	C10orf33					
ILMN_1676099	-0.1844222	0.98020583	SPON2					
ILMN_1768311	-0.2497203	0.97880334	NPIPL3					
ILMN_1775762	-0.2994535	0.975834	GNA12					
ILMN_1689968	-0.412196	0.97220707	PLEKHQ2					
ILMN_1687358	-0.2986337	0.9660672	TMPRSS4					
ILMN_1704294	-0.2695893	0.96394974	CDH3					
ILMN_1778319	-0.3999426	0.95954514	DMKN					
ILMN_1662799	-0.2291535	0.95948136	GPMSM3					
ILMN_1723978	-0.5471423	0.9585848	LGALS1					
ILMN_1673357	-0.334264	0.95752394	SLA2					
ILMN_1730670	-0.4762125	0.95550716	FSTL3					
ILMN_1691662	-0.2668986	0.95518255	LOC100101266					
ILMN_1778941	-0.400535	0.95327836	HNF1B					
ILMN_2309848	-0.6369321	0.949838	FYXDS					
ILMN_2354334	-0.4306184	0.9450449	ATXNL2					
ILMN_1768595	-0.4287379	0.9405392	DLG4					
ILMN_2358652	-0.3726217	0.9391262	NXF1					

			Annotation Cluster 10	Enrichment Score: 2.15	Count	P_Value	Benjamini	
ILMN_2206746	-0.3115692	0.9350952	BGN	BIOCARTA	Lck and Fyn tyrosine kinases in initiation of TCR Activation	6	2.70E-06	2.60E-04
ILMN_1751161	-0.1818679	0.9343799	COL7A1	GOTERM_BP_FAT	T cell selection	6	4.50E-06	1.60E-03
ILMN_2375319	-0.2491265	0.9336667	RASGRP2	GOTERM_BP_FAT	T cell activation	11	8.80E-06	2.50E-03
ILMN_2176063	-0.3155814	0.93324673	FCGR1C	GOTERM_BP_FAT	cell activation	16	9.40E-06	2.30E-03
ILMN_2367384	-0.5173004	0.93168837	EPHB2		Activation of Csk by cAMP-dependent Protein Kinase Inhibits Signaling through the T Cell Receptor			
ILMN_1727271	-0.3755743	0.9295296	WARS	BIOCARTA	Primary immunodeficiency	6	3.20E-05	1.60E-03
ILMN_1770454	-0.4362049	0.9271239	AGRN	KEGG_PATHWAY	regulation of peptidyl-tyrosine phosphorylation	7	3.40E-05	1.70E-03
ILMN_2208903	-0.2595646	0.9267303	CD52	GOTERM_BP_FAT	lymphocyte activation	8	3.80E-05	7.40E-03
ILMN_1685625	-0.5453749	0.92595446	UCP2	GOTERM_BP_FAT	positive regulation of immune system process	12	9.20E-05	1.40E-02
ILMN_1711994	-0.4643634	0.9215085	TCIRG1	GOTERM_BP_FAT	leukocyte activation	13	1.10E-04	1.50E-02
ILMN_1791057	-0.2764992	0.920075	IFNAR2	BIOCARTA	T Helper Cell Surface Molecules	13	1.20E-04	1.50E-02
ILMN_2085862	-0.5261843	0.9159903	SLC15A3	GOTERM_BP_FAT	regulation of calcium-mediated signaling	5	1.30E-04	3.10E-03
ILMN_2070052	-0.3671393	0.9148916	NPIPL3	GOTERM_BP_FAT	positive regulation of immune response	5	1.40E-04	1.60E-02
ILMN_1679880	-0.3090046	0.91471004	THOC6	GOTERM_BP_FAT	hemopoietic or lymphoid organ development	10	1.70E-04	1.70E-02
ILMN_3243664	-0.4874971	0.91295207	NPIPL3	GOTERM_BP_FAT	T cell differentiation	13	2.40E-04	2.20E-02
ILMN_2163723	-0.4142269	0.9102357	KRT7	GOTERM_BP_FAT	activation of immune response	7	2.60E-04	2.20E-02
ILMN_3243238	-0.2350038	0.90686095	TPSAB1	GOTERM_BP_FAT	cell surface	8	3.00E-04	2.50E-02
ILMN_1781626	-0.6013486	0.90442723	C15	GOTERM_CC_FAT	immune system development	15	4.10E-04	1.20E-02
ILMN_1700541	-0.3621139	0.903176	FBLN1	GOTERM_BP_FAT	lymphocyte differentiation	13	4.20E-04	2.90E-02
ILMN_2206098	-0.3154438	0.9030856	ATG10	GOTERM_BP_FAT	T cell receptor complex	8	5.20E-04	3.20E-02
ILMN_2405009	-0.6482333	0.9002332	C1orf151	GOTERM_CC_FAT	thymic T cell selection	4	5.50E-04	1.50E-02
ILMN_1675979	-0.2072399	0.8990485	RBMS3	GOTERM_BP_FAT	external side of plasma membrane	4	6.50E-04	3.60E-02
ILMN_2143685	-0.5237997	0.89562464	CLDN7	BIOCARTA	Bystander B Cell Activation	10	6.70E-04	1.40E-02
ILMN_3237946	-0.36541	0.8955296	PXDN		Severe combined immunodeficiency, T cell-negative, B-cell/natural killer-cell positive	4	6.80E-04	1.30E-02
ILMN_2059549	-0.3507316	0.89245695	SYK	OMIM_DISEASE		3	7.30E-04	1.10E-01
ILMN_1780663	-0.20952	0.890468	KLHL30	GOTERM_BP_FAT	regulation of cellular protein metabolic process	17	8.00E-04	4.00E-02
ILMN_1786823	-0.4492833	0.88830346	ICAM2	GOTERM_BP_FAT	negative regulation of immune system process	7	9.50E-04	4.60E-02
ILMN_1688780	-0.2806633	0.8874346	S100A4	GOTERM_BP_FAT	regulation of lymphocyte activation	9	9.70E-04	4.60E-02
ILMN_1666819	-0.2121657	0.88143635	PHLDB1	GOTERM_BP_FAT	immune response-regulating signal transduction	6	9.80E-04	4.50E-02
ILMN_1711566	-0.6160435	0.87931806	TIMP1	GOTERM_CC_FAT	receptor complex	8	1.30E-03	2.30E-02
ILMN_1761788	-0.318937	0.8782567	MOXD1	GOTERM_BP_FAT	positive regulation of calcium-mediated signaling	4	1.50E-03	6.40E-02
ILMN_1815895	-0.3069491	0.8761135	HLA-DRB1	GOTERM_BP_FAT	hemopoiesis	11	1.50E-03	6.50E-02
ILMN_1782057	-0.3002019	0.8751354	ATP8B2	GOTERM_BP_FAT	regulation of leukocyte activation	9	2.00E-03	7.70E-02
ILMN_1691290	-0.3353199	0.87388796	CELSR3	GOTERM_BP_FAT	positive regulation of lymphocyte activation	7	2.10E-03	7.90E-02
ILMN_2049536	-0.3740616	0.8712451	TRPV2	GOTERM_BP_FAT	leukocyte differentiation	8	2.10E-03	7.80E-02
ILMN_1807972	-0.2756432	0.8699051	MICAL1	GOTERM_BP_FAT	regulation of protein modification process	12	2.50E-03	8.80E-02
ILMN_1751034	-0.3884175	0.8682534	ITPR1L2	BIOCARTA	Antigen Dependent B Cell Activation	4	2.50E-03	4.10E-02
ILMN_1659905	-0.4851455	0.86781186	FKBP10	BIOCARTA	T Cytotoxic Cell Surface Molecules	4	2.50E-03	4.10E-02
					immune response-regulating cell surface receptor signaling pathway	5	2.50E-03	8.80E-02
ILMN_1782538	-0.4386903	0.8672385	VIM	GOTERM_BP_FAT	regulation of protein amino acid phosphorylation	9	2.60E-03	8.90E-02
ILMN_1705783	-0.1545213	0.8622637	NFX1	GOTERM_BP_FAT	regulation of cell activation	9	2.80E-03	9.30E-02
ILMN_3203186	-0.2641656	0.8597576	AL543610	GOTERM_BP_FAT	positive regulation of leukocyte activation	7	3.30E-03	1.10E-01
ILMN_1765446	-0.342277	0.8553318	EMP3	GOTERM_BP_FAT	positive thymic T cell selection	3	3.70E-03	1.20E-01
ILMN_1800354	-0.76649	0.854432	CST3	GOTERM_BP_FAT	positive regulation of peptidyl-tyrosine phosphorylation	5	3.80E-03	1.20E-01
ILMN_1703692	-0.318653	0.8499179	TUBB	GOTERM_BP_FAT	positive regulation of T cell activation	6	3.80E-03	1.20E-01
ILMN_1724994	-0.3724864	0.8418111	COL4A2	GOTERM_BP_FAT	positive regulation of cell activation	7	4.20E-03	1.20E-01
ILMN_2366330	-0.2997862	0.83980304	FERMT3	GOTERM_BP_FAT	Hematopoietic cell lineage	7	4.60E-03	7.60E-02
ILMN_2169801	-0.2454689	0.83863986	TPSAB1	KEGG_PATHWAY	CTL mediated immune response against target cells	4	4.90E-03	6.80E-02
ILMN_2390299	-0.5079346	0.8307578	PSMB8	BIOCARTA	negative thymic T cell selection	3	4.90E-03	1.40E-01
ILMN_1799120	-0.2293101	0.83003724	WFDC2	GOTERM_BP_FAT	regulation of B cell activation	5	5.10E-03	1.40E-01
ILMN_1670305	-1.0948417	0.8281291	SERPING1	GOTERM_BP_FAT	positive regulation of alpha-beta T cell activation	4	5.20E-03	1.40E-01
ILMN_2226955	-0.2938926	0.8268525	VOPP1	GOTERM_BP_FAT	immune response-activating signal transduction	5	5.50E-03	1.50E-01
ILMN_1778401	-0.4915565	0.82583493	HLA-B	GOTERM_BP_FAT	regulation of lymphocyte proliferation	6	5.60E-03	1.50E-01
ILMN_3236021	-0.3892692	0.824837	ANKRD36	GOTERM_BP_FAT	T cell differentiation in the thymus	4	5.80E-03	1.50E-01
ILMN_1716563	-0.2985041	0.8247995	PRKCB					

ILMN_1665943	-0.2437771	0.8244704	MAP4K1	GOTERM_BP_FAT	regulation of leukocyte proliferation	6	5.90E-03	1.50E-01
ILMN_1779257	-0.3663034	0.8213204	CD40	GOTERM_BP_FAT	regulation of mononuclear cell proliferation	6	5.90E-03	1.50E-01
ILMN_1684306	-0.4423175	0.8178873	S100A4	GOTERM_BP_FAT	positive T cell selection	3	6.30E-03	1.50E-01
ILMN_1713901	-0.2925592	0.8159203	KDELR3	GOTERM_BP_FAT	negative T cell selection	3	6.30E-03	1.50E-01
ILMN_1785061	-0.2745637	0.8151372	EPHB2	GOTERM_BP_FAT	positive regulation of alpha-beta T cell proliferation	3	6.30E-03	1.50E-01
ILMN_2111739	-0.4774336	0.8130309	MAN2C1	GOTERM_BP_FAT	positive regulation of lymphocyte proliferation	5	6.70E-03	1.60E-01
ILMN_2408400	-0.2415248	0.81145334	NSUN5	GOTERM_BP_FAT	positive regulation of mononuclear cell proliferation	5	7.10E-03	1.60E-01
ILMN_1666078	-0.2263312	0.80954427	HLA-H	GOTERM_BP_FAT	positive regulation of leukocyte proliferation	5	7.10E-03	1.60E-01
ILMN_2058251	-0.3064233	0.80710375	VIM	GOTERM_BP_FAT	positive regulation of T cell differentiation	4	9.30E-03	2.00E-01
ILMN_2062468	-0.5679551	0.8070511	IGFBP7	BIOCARTA	The Co-Stimulatory Signal During T-cell Activation	4	9.80E-03	1.10E-01
ILMN_1794707	-0.354936	0.80371445	ATH1	GOTERM_BP_FAT	positive regulation of B cell activation	4	1.00E-02	2.10E-01
ILMN_1805750	-0.39717	0.79880387	IFITM3	GOTERM_BP_FAT	antigen receptor-mediated signaling pathway	4	1.00E-02	2.10E-01
ILMN_1735148	-0.3728589	0.79594487	SEC24B	GOTERM_BP_FAT	regulation of humoral immune response	3	1.10E-02	2.20E-01
ILMN_1808777	-0.3808807	0.79474026	EHD2	GOTERM_BP_FAT	positive regulation of cell proliferation	13	1.20E-02	2.20E-01
ILMN_1689004	-0.4236876	0.7932473	TNFRSF12A	GOTERM_BP_FAT	regulation of phosphorylation	14	1.20E-02	2.20E-01
ILMN_1785272	-0.4044341	0.79318005	COL1A2	GOTERM_BP_FAT	positive regulation of lymphocyte differentiation	4	1.20E-02	2.20E-01
ILMN_1789599	-0.6776331	0.7889098	C1orf151	GOTERM_BP_FAT	regulation of cytokine production	8	1.20E-02	2.20E-01
ILMN_2098126	-0.33206	0.7836308	CCLS	GOTERM_BP_FAT	regulation of alpha-beta T cell activation	4	1.30E-02	2.30E-01
ILMN_1713636	-0.3276164	0.7820336	S100A6	GOTERM_BP_FAT	regulation of alpha-beta T cell proliferation	3	1.30E-02	2.30E-01
ILMN_1720287	-0.2498446	0.7791793	E4F1	GOTERM_MF_FAT	protein kinase binding	7	1.40E-02	3.50E-01
ILMN_1690125	-0.4682108	0.77619785	PDLIM7	GOTERM_BP_FAT	positive regulation of protein modification process	8	1.40E-02	2.50E-01
ILMN_1747195	-0.5296944	0.77611643	PSMB8	GOTERM_BP_FAT	positive regulation of cellular protein metabolic process	9	1.50E-02	2.50E-01
ILMN_1712545	-0.3020494	0.7758006	S100A3	GOTERM_BP_FAT	regulation of phosphorus metabolic process	14	1.60E-02	2.60E-01
ILMN_1730777	-0.3567672	0.77183926	KRT19	GOTERM_BP_FAT	regulation of phosphate metabolic process	14	1.60E-02	2.60E-01
					immune response-activating cell surface receptor signaling pathway			
ILMN_1671295	-0.2948444	0.77169406	MST151	GOTERM_BP_FAT	pathway	4	1.60E-02	2.60E-01
ILMN_1653220	-0.2644714	0.7711403	PITPNM1	SP_PIR_KEYWORDS	scid	3	1.70E-02	1.60E-01
ILMN_1705750	-0.4122929	0.7699518	TGM2	GOTERM_BP_FAT	regulation of MAPKK cascade	6	1.70E-02	2.70E-01
ILMN_3248247	-0.3075986	0.76758534	LOC349114	KEGG_PATHWAY	Antigen processing and presentation	6	1.70E-02	1.10E-01
ILMN_1654246	-0.6002158	0.7673532	SIRT6	BIOCARTA	HIV Induced T Cell Apoptosis	3	1.90E-02	1.70E-01
ILMN_1815500	-0.3069432	0.7641663	ITPR3	GOTERM_BP_FAT	positive regulation of protein metabolic process	9	1.90E-02	2.80E-01
ILMN_1787109	-0.5007137	0.76132065	CLK2	GOTERM_BP_FAT	protein amino acid phosphorylation	17	2.10E-02	3.10E-01
ILMN_1719449	-0.3440301	0.754508	DCLK2	GOTERM_BP_FAT	regulation of T cell activation	6	2.20E-02	3.20E-01
ILMN_1815057	-0.3384102	0.75351226	PDGFRB	BIOCARTA	IL 5 Signaling Pathway	3	2.30E-02	1.90E-01
ILMN_2155719	-0.5270782	0.7532077	NBPF1	GOTERM_BP_FAT	activation of MAPK activity	5	2.60E-02	3.50E-01
ILMN_1777342	-0.2784544	0.75301546	PREX1	GOTERM_BP_FAT	positive regulation of cytosine biosynthetic process	4	2.80E-02	3.60E-01
ILMN_1811702	-0.4603844	0.7490145	GRN	GOTERM_BP_FAT	positive regulation of B cell proliferation	3	3.00E-02	3.80E-01
ILMN_1705602	-0.4110136	0.7484236	KLHL17	GOTERM_BP_FAT	protein kinase cascade	11	3.10E-02	3.90E-01
ILMN_1651767	-0.3164083	0.7468634	MKL1	GOTERM_MF_FAT	kinase binding	7	3.20E-02	4.80E-01
ILMN_1895548	-0.2717167	0.7460645	AK021726	GOTERM_BP_FAT	regulation of T cell differentiation	4	3.20E-02	4.00E-01
ILMN_1780806	-0.3624143	0.7455973	ANKRD36B	GOTERM_BP_FAT	positive regulation of protein amino acid phosphorylation	5	3.40E-02	4.10E-01
ILMN_3228688	-0.582792	0.74362123	HLA-DRB1	GOTERM_BP_FAT	positive regulation of protein kinase activity	8	3.40E-02	4.00E-01
ILMN_1738675	-0.2855184	0.7427395	PTPN6	GOTERM_BP_FAT	cell proliferation	12	3.70E-02	4.30E-01
					regulation of adaptive immune response based on somatic recombination of immune receptors built from immunoglobulin superfamily domains			
ILMN_2090105	-0.9173182	0.7417683	TAGLN2	GOTERM_BP_FAT	positive regulation of kinase activity	4	3.90E-02	4.40E-01
ILMN_1752526	-0.308724	0.73536175	RNF144B	GOTERM_BP_FAT	MAPKK cascade	8	4.00E-02	4.40E-01
ILMN_2101885	-0.3070515	0.73364246	TUBB	GOTERM_BP_FAT	regulation of adaptive immune response	7	4.10E-02	4.50E-01
ILMN_1675709	-0.2769983	0.7305087	ARFGAP1	GOTERM_BP_FAT	regulation of B cell mediated immunity	4	4.10E-02	4.40E-01
ILMN_1803988	-0.3516586	0.72845715	MCL1	GOTERM_BP_FAT	regulation of immunoglobulin mediated immune response	3	4.20E-02	4.50E-01
ILMN_1708025	-0.3238424	0.7281853	RBPMS	GOTERM_BP_FAT	positive regulation of phosphorylation	5	4.20E-02	4.60E-01
ILMN_3246005	-0.3095196	0.72722805	KDM5B	GOTERM_BP_FAT	positive regulation of transferase activity	8	4.70E-02	4.70E-01
ILMN_1691717	-0.3052667	0.72658294	RHBDF2	KEGG_PATHWAY	T cell receptor signaling pathway	6	4.70E-02	2.10E-01
ILMN_1807493	-0.4520136	0.7222337	ACVR1L	GOTERM_BP_FAT	positive regulation of phosphate metabolic process	5	4.80E-02	4.80E-01
ILMN_17727043	-0.2914142	0.721914	GLT25D1	GOTERM_BP_FAT	positive regulation of phosphorus metabolic process	5	4.80E-02	4.80E-01
ILMN_1814917	-0.3462726	0.72037286	TLE2	GOTERM_BP_FAT	IL 17 Signaling Pathway	3	5.00E-02	3.40E-01
ILMN_1652631	-0.5696183	0.71945685	GLIPR2	BIOCARTA				

ILMN_1786197	-0.4536233	0.56482023	NR2F1
ILMN_1752340	-0.6061316	0.56157315	ARF5
ILMN_1761068	-0.5335256	0.56072944	DKFZp434K1323
ILMN_1728049	-0.517863	0.51490104	S100A16
ILMN_1772888	-0.6104952	0.44741943	AX746718
ILMN_3281563	-0.7814937	0.377732	RPL12

Annotation Cluster	Enrichment Score:	Term	Count	P_Value	Benjamini	
Annotation Cluster 15	Enrichment Score: 1.56	GOTERM_BP_FAT	regulation of MAPKK cascade	6	1.70E-02	2.70E-01
		GOTERM_BP_FAT	regulation of cellular response to stress	5	5.30E-02	4.90E-01
		GOTERM_BP_FAT	positive regulation of molecular function	13	1.10E-01	6.70E-01
		GOTERM_BP_FAT	positive regulation of transport	4	5.90E-01	9.90E-01
		SP_PIR_KEYWORDS	protease inhibitor	Count	P_Value	Benjamini
		GOTERM_MF_FAT	endopeptidase inhibitor activity	6	8.50E-03	1.10E-01
		SP_PIR_KEYWORDS	Serine protease inhibitor	7	1.30E-02	3.60E-01
		GOTERM_MF_FAT	peptidase inhibitor activity	5	1.40E-02	1.50E-01
		GOTERM_MF_FAT	serine-type endopeptidase inhibitor activity	7	1.60E-02	3.60E-01
		UP_SEQ_FEATURE	site:Reactive bond	5	3.40E-02	4.80E-01
		GOTERM_MF_FAT	enzyme inhibitor activity	3	9.80E-02	9.30E-01
				7	1.50E-01	7.50E-01
Annotation Cluster 16	Enrichment Score: 1.54	Annotation Cluster 16	zymogen	Count	P_Value	Benjamini
		SP_PIR_KEYWORDS	propeptide:Activation peptide	10	7.40E-04	1.60E-02
		UP_SEQ_FEATURE	domain:Peptidase S1	6	1.70E-03	1.90E-01
		UP_SEQ_FEATURE	INTERPRO	6	8.40E-03	5.30E-01
		INTERPRO	Peptidase S1A_chymotrypsin	6	1.00E-02	4.50E-01
		INTERPRO	Peptidase S1/S6_chymotrypsin/Hap_active site	6	1.10E-02	4.30E-01
		PIR_SUPERFAMILY	Peptidase S1 and S6_chymotrypsin/Hap	6	1.60E-02	4.50E-01
		SP_PIR_KEYWORDS	PIRSF001135:trypsin	4	1.90E-02	7.10E-01
		SP_PIR_KEYWORDS	Serine protease	6	2.20E-02	2.00E-01
		SP_PIR_KEYWORDS	serine proteinase	4	2.50E-02	2.20E-01
		GOTERM_MF_FAT	endopeptidase activity	11	2.80E-02	4.50E-01
		SP_PIR_KEYWORDS	Protease	12	2.80E-02	2.30E-01
		SMART	Trp_Spc	6	4.00E-02	8.50E-01
		GOTERM_MF_FAT	serine-type endopeptidase activity	6	5.40E-02	6.00E-01
		GOTERM_MF_FAT	peptidase activity	13	7.90E-02	7.20E-01
		UP_SEQ_FEATURE	active site:Charge relay system	6	8.30E-02	9.30E-01
		GOTERM_MF_FAT	serine-type peptidase activity	6	8.80E-02	7.00E-01
		GOTERM_MF_FAT	serine hydrolase activity	6	9.10E-02	6.90E-01
		GOTERM_MF_FAT	peptidase activity_acting on L-amino acid peptides	12	1.10E-01	7.20E-01
		GOTERM_BP_FAT	proteolysis	18	2.70E-01	8.80E-01
		SP_PIR_KEYWORDS	hydrolase	22	2.80E-01	7.40E-01
Annotation Cluster 17	Enrichment Score: 1.51	Annotation Cluster 17	region of interest:Coil 2	Count	P_Value	Benjamini
		UP_SEQ_FEATURE	region of interest:Linker 12	5	6.80E-03	4.90E-01
		UP_SEQ_FEATURE	region of interest:Coil 1B	5	9.40E-03	5.30E-01
		UP_SEQ_FEATURE	region of interest:Linker 1	5	9.40E-03	5.30E-01
		UP_SEQ_FEATURE	region of interest:Coil 1A	5	9.40E-03	5.30E-01
		UP_SEQ_FEATURE	region of interest:Rod	5	9.80E-03	5.20E-01
		UP_SEQ_FEATURE	region of interest:Head	5	1.10E-02	5.30E-01
		INTERPRO	Filament	5	1.30E-02	4.30E-01
		INTERPRO	Intermediate filament protein_conserved site	5	1.30E-02	4.30E-01
		SP_PIR_KEYWORDS	Intermediate filament	5	1.30E-02	1.40E-01
		INTERPRO	Intermediate filament protein	5	1.40E-02	4.20E-01
		PIR_SUPERFAMILY	PIRSF002282:cytoskeletal keratin	5	1.60E-02	8.70E-01
		INTERPRO	Type II keratin	3	4.80E-02	7.10E-01
		UP_SEQ_FEATURE	site:Stutter	3	5.70E-02	8.90E-01
		UP_SEQ_FEATURE	region of interest:Tail	4	5.90E-02	8.90E-01
		GOTERM_BP_FAT	cytoskeleton organization	11	7.70E-02	6.00E-01
		GOTERM_CC_FAT	intermediate filament	6	1.20E-01	6.90E-01
		GOTERM_CC_FAT	intermediate filament cytoskeleton	6	1.20E-01	7.00E-01
		SP_PIR_KEYWORDS	keratin	4	2.40E-01	7.00E-01
		GOTERM_CC_FAT	keratin filament	3	3.50E-01	9.20E-01
		GOTERM_CC_FAT	cytoskeletal part	14	5.90E-01	9.60E-01
Annotation Cluster 18	Enrichment Score: 1.46	Annotation Cluster 18	Immunoglobulin-like fold	Count	P_Value	Benjamini
		INTERPRO	Immunoglobulin/major histocompatibility complex, conserved	20	7.70E-05	3.90E-02
		INTERPRO	site	7	8.10E-04	1.90E-01
		INTERPRO	Immunoglobulin-like	16	1.70E-03	2.00E-01

SP_PIR_KEYWORDS	Immunoglobulin domain					13	9.60E-03	1.10E-01
INTERPRO	Immunoglobulin subtype					9	5.80E-02	7.30E-01
UP_SEQ_FEATURE	domain:Ig-like C2-type 1					6	7.40E-02	9.20E-01
UP_SEQ_FEATURE	domain:Ig-like C2-type 2					6	7.60E-02	9.20E-01
SMART	Ig					9	1.70E-01	9.60E-01
UP_SEQ_FEATURE	domain:Ig-like C2-type 3					4	1.70E-01	9.80E-01
UP_SEQ_FEATURE	domain:Ig-like V-type					4	1.80E-01	9.80E-01
INTERPRO	Immunoglobulin subtype 2					5	2.60E-01	9.60E-01
SMART	IGc2					5	4.30E-01	9.90E-01
INTERPRO	Immunoglobulin					4	4.70E-01	1.00E+00
Annotation Cluster 19	Enrichment Score: 1.46					Count	P_Value	Benjamini
GOTERM_BP_FAT	in utero embryonic development					8	1.10E-02	2.10E-01
GOTERM_BP_FAT	blastocyst development					4	2.10E-02	3.00E-01
GOTERM_BP_FAT	blastocyst formation					3	3.00E-02	3.80E-01
GOTERM_BP_FAT	chordate embryonic development					9	8.60E-02	6.20E-01
GOTERM_BP_FAT	embryonic development ending in birth or egg hatching					9	8.80E-02	6.20E-01
Annotation Cluster 20	Enrichment Score: 1.44					Count	P_Value	Benjamini
GOTERM_CC_FAT	lysosome					8	3.00E-02	3.00E-01
GOTERM_CC_FAT	lysic vacuole					8	3.00E-02	3.00E-01
SP_PIR_KEYWORDS	lysosome					6	3.10E-02	2.40E-01
GOTERM_CC_FAT	vacuole					8	6.60E-02	5.20E-01
Annotation Cluster 21	Enrichment Score: 1.33					Count	P_Value	Benjamini
SP_PIR_KEYWORDS	calcium binding					7	1.30E-03	2.30E-02
INTERPRO	S100/CaBP-9k-type, calcium binding, subdomain					4	4.60E-03	2.90E-01
INTERPRO	S100/CaBP-9k-type, calcium binding					4	5.10E-03	2.90E-01
UP_SEQ_FEATURE	calcium-binding region:1; low affinity					3	1.90E-02	6.60E-01
INTERPRO	EF-HAND_1					8	2.00E-02	5.10E-01
UP_SEQ_FEATURE	domain:EF-hand 1					7	2.10E-02	6.80E-01
UP_SEQ_FEATURE	domain:EF-hand 2					7	2.10E-02	6.80E-01
UP_SEQ_FEATURE	calcium-binding region:2; high affinity					3	2.50E-02	7.10E-01
SP_PIR_KEYWORDS	EF hand					4	3.30E-02	2.40E-01
PIR_SUPERFAMILY	PIRSFO02353:5-100 protein					3	3.60E-02	7.90E-01
INTERPRO	EF-HAND_2					7	5.50E-02	7.30E-01
INTERPRO	EF-Hand type					7	7.90E-02	7.60E-01
UP_SEQ_FEATURE	calcium-binding region:2					3	3.90E-01	1.00E+00
UP_SEQ_FEATURE	calcium-binding region:1					3	4.40E-01	1.00E+00
INTERPRO	EF hand					3	4.90E-01	1.00E+00
INTERPRO	Calcium-binding EF-hand					3	5.40E-01	1.00E+00
SMART	EFh					3	6.80E-01	1.00E+00
Annotation Cluster 22	Enrichment Score: 1.31					Count	P_Value	Benjamini
GOTERM_BP_FAT	cell migration					11	4.70E-03	1.40E-01
GOTERM_BP_FAT	cell motion					15	5.70E-03	1.50E-01
GOTERM_BP_FAT	cell motility					11	9.70E-03	2.10E-01
GOTERM_BP_FAT	localization of cell					11	9.70E-03	2.10E-01
SP_PIR_KEYWORDS	inflammatory response					5	1.30E-02	1.40E-01
GOTERM_BP_FAT	cell chemotaxis					4	1.60E-02	2.60E-01
KEGG_PATHWAY	Cytokine-cytokine receptor interaction					11	2.10E-02	1.10E-01
GOTERM_BP_FAT	taxis					7	2.30E-02	3.20E-01
GOTERM_BP_FAT	chemotaxis					7	2.30E-02	3.20E-01
INTERPRO	Small chemokine, C-C group, conserved site					3	3.90E-02	6.70E-01
PIR_SUPERFAMILY	PIRSFO01950:small inducible chemokine, C/CC types					3	5.10E-02	8.10E-01
GOTERM_BP_FAT	locomotory behavior					8	8.20E-02	6.10E-01
GOTERM_BP_FAT	leukocyte chemotaxis					3	9.10E-02	6.30E-01
INTERPRO	Small chemokine, interleukin-8-like					3	9.40E-02	8.00E-01
GOTERM_BP_FAT	behavior					11	1.10E-01	6.70E-01
GOTERM_MF_FAT	chemokine activity					3	1.20E-01	7.30E-01
GOTERM_MF_FAT	chemokine receptor binding					3	1.40E-01	7.60E-01
SMART	SCY					3	1.40E-01	9.50E-01
SP_PIR_KEYWORDS	cytokine					5	1.60E-01	6.10E-01
GOTERM_BP_FAT	leukocyte migration					3	1.80E-01	7.90E-01

	BBID	109_Chemokine_families	3	2.00E-01	9.60E-01
	SP_PIR_KEYWORDS	chemotaxis	3	2.10E-01	6.70E-01
	GOTERM_MF_FAT	cytokine activity	5	2.60E-01	8.70E-01
Annotation Cluster 23	Enrichment Score: 1.31		Count	P_Value	Benjamini
	GOTERM_BP_FAT	virus-host interaction	3	3.00E-02	3.80E-01
	GOTERM_BP_FAT	viral reproductive process	4	5.30E-02	4.90E-01
	GOTERM_BP_FAT	viral reproduction	4	7.30E-02	5.80E-01
Annotation Cluster 24	Enrichment Score: 1.31		Count	P_Value	Benjamini
	GOTERM_BP_FAT	negative regulation of immune system process	7	9.50E-04	4.60E-02
	GOTERM_BP_FAT	negative regulation of lymphocyte activation	3	1.70E-01	7.70E-01
	GOTERM_BP_FAT	negative regulation of leukocyte activation	3	1.80E-01	7.90E-01
Annotation Cluster 25	Enrichment Score: 1.29		Count	P_Value	Benjamini
	SP_PIR_KEYWORDS	sushi	4	2.80E-02	2.30E-01
	INTERPRO	Sushi/SCR/CCP	4	3.40E-02	6.50E-01
	INTERPRO	Complement control module	4	3.50E-02	6.50E-01
Annotation Cluster 26	Enrichment Score: 1.26		Count	P_Value	Benjamini
	SMART	CCP	4	6.20E-02	8.90E-01
	UP_SEQ_FEATURE	domain:Sushi 2	3	9.50E-02	9.30E-01
	UP_SEQ_FEATURE	domain:Sushi 1	3	9.50E-02	9.30E-01
Annotation Cluster 26	Enrichment Score: 1.26		Count	P_Value	Benjamini
	GOTERM_BP_FAT	cellular calcium ion homeostasis	8	1.30E-02	2.30E-01
	GOTERM_BP_FAT	calcium ion homeostasis	8	1.50E-02	2.50E-01
	GOTERM_BP_FAT	cellular metal ion homeostasis	8	1.80E-02	2.80E-01
	GOTERM_BP_FAT	metal ion homeostasis	8	2.30E-02	3.20E-01
	GOTERM_BP_FAT	cellular di-, tri-valent inorganic cation homeostasis	8	3.70E-02	4.20E-01
	GOTERM_BP_FAT	cation homeostasis	9	4.30E-02	4.50E-01
	GOTERM_BP_FAT	di-, tri-valent inorganic cation homeostasis	8	4.60E-02	4.70E-01
	GOTERM_BP_FAT	homeostatic process	17	5.20E-02	4.90E-01
	GOTERM_BP_FAT	cellular cation homeostasis	8	6.00E-02	5.20E-01
	GOTERM_BP_FAT	elevation of cytosolic calcium ion concentration	5	6.40E-02	5.40E-01
	GOTERM_BP_FAT	cytosolic calcium ion homeostasis	5	7.90E-02	6.00E-01
	GOTERM_BP_FAT	cellular homeostasis	11	1.10E-01	6.70E-01
	GOTERM_BP_FAT	ion homeostasis	10	1.10E-01	6.70E-01
	GOTERM_BP_FAT	cellular ion homeostasis	9	1.40E-01	7.20E-01
	GOTERM_BP_FAT	cellular chemical homeostasis	9	1.50E-01	7.40E-01
	GOTERM_BP_FAT	chemical homeostasis	10	2.70E-01	8.80E-01
Annotation Cluster 27	Enrichment Score: 1.2		Count	P_Value	Benjamini
	UP_SEQ_FEATURE	domain:SH3	7	1.90E-02	6.80E-01
	SP_PIR_KEYWORDS	sh3 domain	7	3.70E-02	2.60E-01
	INTERPRO	Src homology-3 domain	7	5.30E-02	7.30E-01
	SMART	SH3	7	1.30E-01	9.80E-01
Annotation Cluster 28	Enrichment Score: 1.16		Count	P_Value	Benjamini
	INTERPRO	Calponin-like actin-binding	5	1.20E-02	4.30E-01
	SMART	CH	5	2.70E-02	8.50E-01
	UP_SEQ_FEATURE	domain:CH	3	8.70E-02	9.30E-01
Annotation Cluster 29	Enrichment Score: 1.14		Count	P_Value	Benjamini
	SP_PIR_KEYWORDS	cytoskeleton	6	8.70E-01	1.00E+00
	KEGG_PATHWAY	Toll-like receptor signaling pathway	7	1.00E-02	8.90E-02
	GOTERM_BP_FAT	response to lipopolysaccharide	4	8.90E-02	6.20E-01
Annotation Cluster 30	Enrichment Score: 1.1		Count	P_Value	Benjamini
	GOTERM_BP_FAT	response to molecule of bacterial origin	4	1.10E-01	6.80E-01
	GOTERM_BP_FAT	response to bacterium	5	2.70E-01	8.80E-01
	SP_PIR_KEYWORDS	phosphotransferase	7	3.10E-02	2.40E-01
Annotation Cluster 31	Enrichment Score: 1.09		Count	P_Value	Benjamini
	SP_PIR_KEYWORDS	autophosphorylation	3	1.10E-01	5.20E-01
	SP_PIR_KEYWORDS	ATP	6	1.40E-01	5.90E-01
Annotation Cluster 31	Enrichment Score: 1.09		Count	P_Value	Benjamini
	GOTERM_BP_FAT	muscle organ development	8	2.60E-02	3.40E-01
	GOTERM_BP_FAT	muscle tissue development	5	9.20E-02	6.30E-01
	GOTERM_BP_FAT	striated muscle tissue development	4	2.20E-01	8.40E-01

			Count	P_Value	Benjamini
Annotation Cluster 32	Enrichment Score: 1.09	GOTERM_CC_FAT	platelet alpha granule	5	7.90E-03 1.30E-01
		GOTERM_CC_FAT	platelet alpha granule lumen	4	2.00E-02 2.60E-01
		GOTERM_CC_FAT	cytoplasmic membrane-bound vesicle lumen	4	2.40E-02 2.90E-01
		GOTERM_CC_FAT	vesicle lumen	4	2.70E-02 2.80E-01
		GOTERM_CC_FAT	secretory granule	6	1.10E-01 6.80E-01
		GOTERM_CC_FAT	cytoplasmic vesicle part	6	1.20E-01 7.00E-01
		GOTERM_CC_FAT	cytoplasmic membrane-bound vesicle	11	2.50E-01 8.70E-01
		GOTERM_CC_FAT	membrane-bound vesicle	11	2.80E-01 8.90E-01
		GOTERM_CC_FAT	vesicle	12	3.40E-01 9.20E-01
		GOTERM_CC_FAT	cytoplasmic vesicle	11	4.20E-01 9.40E-01
Annotation Cluster 33	Enrichment Score: 1.06	SP_PIR_KEYWORDS	laminin egf-like domain	Count	P_Value Benjamini
		INTERPRO	EGF-like, laminin	3	4.80E-02 3.20E-01
		SMART	EGF Lam	3	9.40E-02 8.00E-01
Annotation Cluster 34	Enrichment Score: 1.06	GOTERM_MF_FAT	glycosaminoglycan binding	Count	P_Value Benjamini
		GOTERM_MF_FAT	polysaccharide binding	8	2.60E-03 2.20E-01
		GOTERM_MF_FAT	pattern binding	8	4.40E-03 2.90E-01
		GOTERM_MF_FAT	peptidoglycan binding	8	4.40E-03 2.90E-01
		GOTERM_MF_FAT	carbohydrate binding	3	5.90E-03 2.80E-01
		GOTERM_BP_FAT	positive regulation of tumor necrosis factor production	12	7.50E-03 3.00E-01
		GOTERM_BP_FAT	regulation of tumor necrosis factor production	3	1.70E-02 2.70E-01
		GOTERM_BP_FAT	positive regulation of cytokine production	3	6.70E-02 5.50E-01
		GOTERM_BP_FAT	positive regulation of MAPKK cascade	4	1.30E-01 7.00E-01
		UP_SEQ_FEATURE	repeat:LRR 4	3	1.40E-01 7.20E-01
		UP_SEQ_FEATURE	repeat:LRR 6	6	1.80E-01 9.80E-01
		GOTERM_BP_FAT	response to bacterium	5	2.30E-01 9.90E-01
		UP_SEQ_FEATURE	repeat:LRR 3	5	2.70E-01 8.80E-01
		INTERPRO	leucine-rich repeat	6	2.80E-01 1.00E+00
		UP_SEQ_FEATURE	repeat:LRR 5	5	2.80E-01 9.70E-01
		UP_SEQ_FEATURE	repeat:LRR 1	6	2.90E-01 1.00E+00
		SP_PIR_KEYWORDS	leucine-rich repeat	6	3.20E-01 1.00E+00
		UP_SEQ_FEATURE	repeat:LRR 2	6	3.30E-01 7.80E-01
		UP_SEQ_FEATURE	repeat:LRR 9	6	3.30E-01 1.00E+00
		UP_SEQ_FEATURE	repeat:LRR 8	3	4.70E-01 1.00E+00
		UP_SEQ_FEATURE	repeat:LRR 7	3	5.30E-01 1.00E+00
		UP_SEQ_FEATURE	domain:EGF-like 1	3	6.20E-01 1.00E+00
Annotation Cluster 35	Enrichment Score: 1.06	INTERPRO	EGF-like region, conserved site	Count	P_Value Benjamini
		SP_PIR_KEYWORDS	egf-like domain	11	4.10E-03 3.50E-01
		INTERPRO	EGF	7	5.40E-02 3.40E-01
		INTERPRO	EGF-like, type 3	5	7.70E-02 7.80E-01
		INTERPRO	EGF-like	6	9.90E-02 8.10E-01
		INTERPRO	EGF-type aspartate/asparagine hydroxylation conserved site	6	1.10E-01 8.30E-01
		UP_SEQ_FEATURE	domain:EGF-like 2; calcium-binding	4	1.20E-01 8.50E-01
		SMART	EGF	3	1.40E-01 9.80E-01
		UP_SEQ_FEATURE	domain:EGF-like 1	6	2.30E-01 9.50E-01
		UP_SEQ_FEATURE	domain:EGF-like 1	3	4.10E-01 1.00E+00
Annotation Cluster 36	Enrichment Score: 1.04	GOTERM_MF_FAT	identical protein binding	Count	P_Value Benjamini
		GOTERM_MF_FAT	protein dimerization activity	15	4.50E-02 5.50E-01
		GOTERM_MF_FAT	protein homodimerization activity	12	1.10E-01 7.20E-01
Annotation Cluster 37	Enrichment Score: 1.04	GOTERM_BP_FAT	activation of immune response	8	1.60E-01 7.60E-01
		GOTERM_BP_FAT	innate immune response	Count	P_Value Benjamini
		SP_PIR_KEYWORDS	innate immunity	8	3.00E-04 2.50E-02
		GOTERM_BP_FAT	humoral immune response	6	4.10E-02 4.50E-01
		GOTERM_BP_FAT	complement activation	4	6.30E-02 3.70E-01
		GOTERM_BP_FAT	activation of plasma proteins involved in acute inflammatory	4	9.40E-02 6.40E-01
		GOTERM_BP_FAT	response	3	1.10E-01 6.80E-01
		KEGG_PATHWAY	Complement and coagulation cascades	3	1.20E-01 6.80E-01
		KEGG_PATHWAY	Complement and coagulation cascades	4	1.30E-01 4.40E-01

	GOTERM_BP_FAT	protein maturation by peptide bond cleavage		3	3.30E-01	9.20E-01
	GOTERM_BP_FAT	acute inflammatory response		3	3.90E-01	9.50E-01
	GOTERM_BP_FAT	protein processing		3	4.50E-01	9.70E-01
	GOTERM_BP_FAT	protein maturation		3	5.00E-01	9.80E-01
Annotation Cluster 38	Enrichment Score: 1.01		Count	P_Value	Benjamini	
	INTERPRO	von Willebrand factor, type A	4	7.80E-02	7.70E-01	
	UP_SEQ_FEATURE	short sequence motif:Cell attachment site	4	8.60E-02	9.30E-01	
	SMART	VWA	4	1.40E-01	9.70E-01	
Annotation Cluster 39	Enrichment Score: 0.98		Count	P_Value	Benjamini	
	UP_SEQ_FEATURE	domain:CUB 1	3	6.70E-02	9.10E-01	
	UP_SEQ_FEATURE	domain:CUB 2	3	6.70E-02	9.10E-01	
	INTERPRO	CUB	3	1.40E-01	8.60E-01	
	SMART	CUB	3	2.00E-01	9.40E-01	