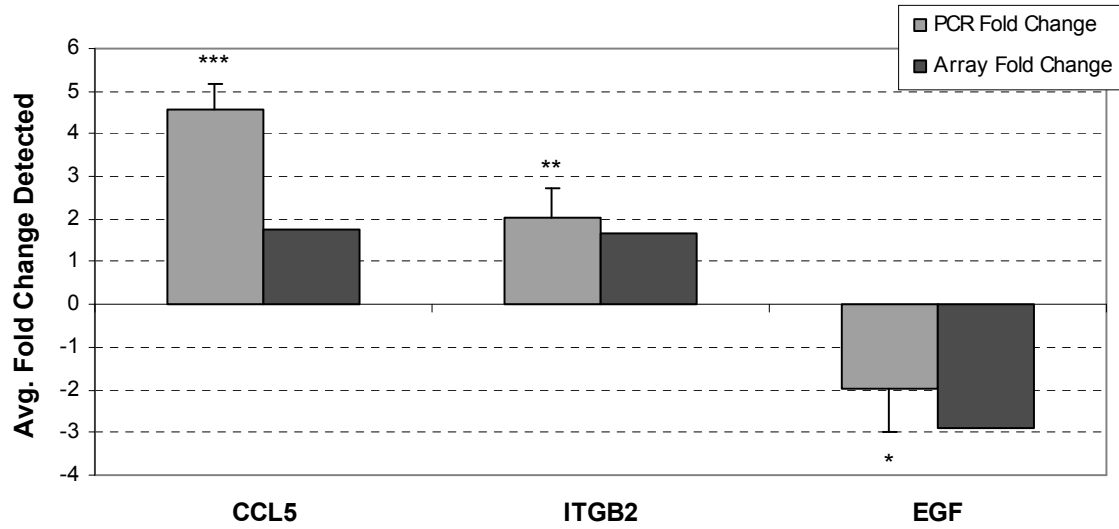
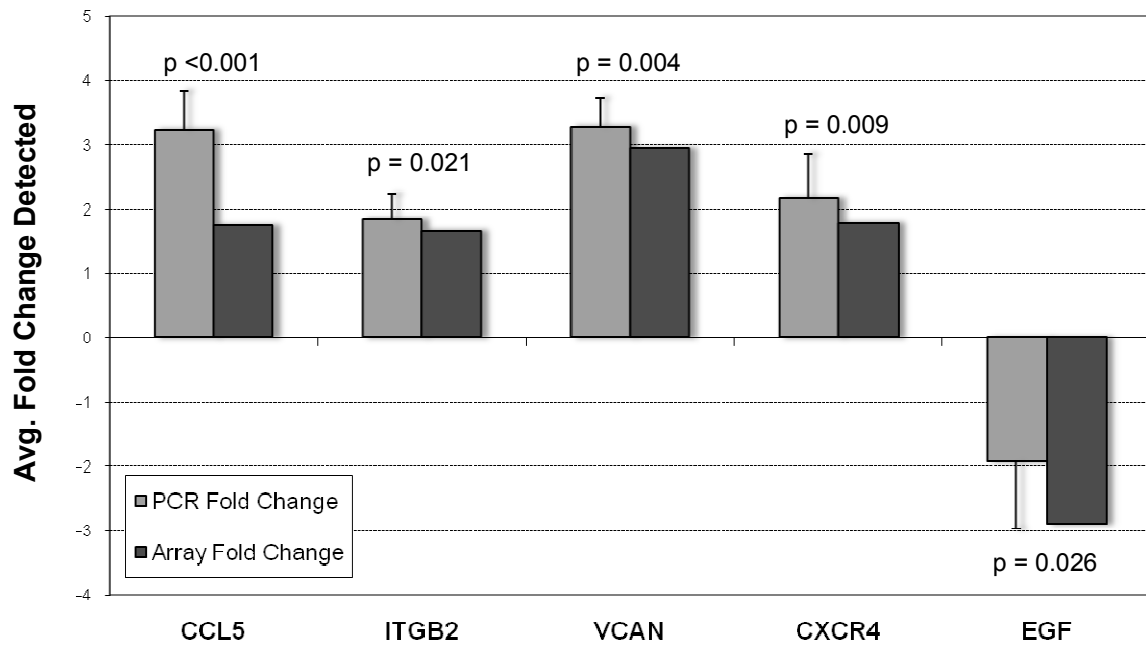


Supplemental Figure 2 - Taqman® RT-qPCR results obtained when comparing *DGF_{lo}* to *DGF_{hi}* patients. GAPDH was used as the endogenous control. The fold change was calculated using the $\Delta\Delta C_t$ method and compared to the fold change detected in the microarray data.



Supplemental Figure 3 - Taqman® RT-qPCR results obtained when comparing a DGF_{lo} (n=20) to DGF_{hi} (n=15) independent set of patients. GAPDH was used as the endogenous control. The fold change was calculated using the $\Delta\Delta C_t$ method and compared to the fold change detected in the microarray data.



Supplemental Table-1. Indications for dialysis after kidney transplantation for those 25 patients with DGF

Patient Group	Patient ID	Dialysis Cause
DGF-hi	122	Hyperkalemia, Oliguria
DGF-hi	125	Hyperkalemia
DGF-hi	89	Hyperkalemia
DGF-hi	178	Hyperkalemia
DGF-hi	57	Hyperkalemia
DGF-hi	54	Hyperkalemia
DGF-hi	123	Hyperkalemia
DGF-hi	51	Fluid Overload
DGF-hi	45	Hyperkalemia
DGF-hi	34	Fluid Overload
DGF-hi	83	Hyperkalemia
DGF-hi	71	Oligouria
DGF-lo	79	Hyperkalemia
DGF-lo	85	Oligouria
DGF-lo	105	Oligouria
DGF-lo	64	Hyperkalemia
DGF-lo	50	Uremia

DGF-lo	137	Anuria
DGF-lo	3	Oligouria
DGF-lo	144	Oligouria
DGF-lo	20	Oligouria
DGF-lo	80	Oligouria
DGF-lo	1	Hyperkalemia, Orthopnea
DGF-lo	66	Anuria
DGF-lo	98	Oligouria

Supplemental Table 2- Histological evaluation of pre-implantation biopsies classified by sub-groups

Patient Group	score	GSC	IF	TA
nDGF-hi (number of patients)	0	38	15	22
	1	6	28	21
	2	1	2	2
	3	0	0	0
	N/A	6	6	6
	total	51	51	51
nDGF-lo (number of patients)	0	11	4	9
	1	2	9	4
	2	0	0	0
	3	0	0	0
	N/A	3	3	3
	total	16	16	16
DGF-hi (number of patients)	0	4	1	3

patients)				
	1	2	2	2
	2	0	3	1
	3	0	0	0
	N/A	4	4	4
	total	10	10	10
DGF-lo				
(number of				
patients)	0	10	6	6
	1	2	4	4
	2	0	2	1
	3	0	0	0
	no report	2	2	2
	other	0	0	1
	total	14	14	14

GS: glomerulosclerosis, IF: Interstitial fibrosis, TA: Tubular atrophy, N/A: information non-available

Supplemental Table 3. Differentially expressed genes when subjects were classified into two groups based on their GFR at 1 month, those having eGFR > 45 (GFR_{hi}) and those having eGFR ≤ 45 (GFR_{lo}).

Affymetrix ID	Entrez ID	Gene Symbol	P-value
1405_i_at	6352	CCL5*	0.00934931
200095_x_at	6204	RPS10	0.00329962
200614_at	1213	CLTC	0.00053168
200668_s_at	7323	UBE2D3	0.00472971
200691_s_at	3313	HSPA9	0.00036642
200692_s_at	3313	HSPA9	0.00209734
200738_s_at	5230	PGK1	0.00071534
200817_x_at	6204	RPS10	0.00576268
200883_at	7385	UQCRC2	0.00868953
200886_s_at	5223	PGAM1	0.00166022
201093_x_at	6389	SDHA	0.00372287
201175_at	51075	TMX2	0.00042242
201225_s_at	10250	SRRM1	0.00736362
201322_at	506	ATP5B	0.00385725
201413_at	3295	HSD17B4	0.00854245
201519_at	9868	TOMM70A	0.00940693
201583_s_at	10483	SEC23B	0.00514192
201800_s_at	5007	OSBP	0.0018375
201894_s_at	NA	NA	0.00927171
201929_s_at	8502	PKP4	0.00936734
201966_at	4720	NDUFS2	0.00176994
201968_s_at	5236	PGM1	0.00572536
202043_s_at	6611	SMS	0.00726753
202069_s_at	3419	IDH3A	0.00285198
202070_s_at	3419	IDH3A	0.00874511
202119_s_at	8895	CPNE3	0.0010619
202206_at	10123	ARL4C	0.00504708
202207_at	10123	ARL4C	0.00082136
202208_s_at	10123	ARL4C	0.00119403
202237_at	4837	NNMT	0.00508219
202508_s_at	6616	SNAP25	0.0002881
202539_s_at	3156	HMGCR	0.00588158
202554_s_at	2947	GSTM3	0.0037211
202621_at	3661	IRF3	0.00380419
202780_at	5019	OXCT1	0.0057515
202783_at	23530	NNT	0.00021666
202784_s_at	23530	NNT	0.00161387

202803_s_at	3689	ITGB2*	0.00856903
202825_at	291	SLC25A4	0.00324583
203039_s_at	4719	NDUFS1	0.00454936
203116_s_at	2235	FECH	0.00425573
203207_s_at	9650	MTFR1	0.00852269
203282_at	2632	GBE1	0.00836552
203293_s_at	3998	LMAN1	0.00510389
203485_at	6252	RTN1	0.00796256
203538_at	819	CAMLG	0.00812108
203641_s_at	22837	COBLL1	0.00404365
203715_at	6905	TBCE	0.00194751
203760_s_at	6503	SLA	0.00953455
204118_at	962	CD48	0.00981061
204175_at	51042	ZNF593	0.00339511
204198_s_at	864	RUNX3	0.00210313
204268_at	6273	S100A2	0.00295721
204563_at	6402	SELL	0.00346123
204639_at	100	ADA	0.00433585
204655_at	6352	CCL5	0.00273541
204661_at	1043	CD52	0.00286466
204697_s_at	1113	CHGA	0.00285271
204774_at	2123	EVI2A	0.00977341
204786_s_at	3455	IFNAR2	0.00767579
204834_at	10875	FGL2	0.00952643
204882_at	9938	ARHGAP25	0.00864615
204891_s_at	3932	LCK	0.00598386
204971_at	1475	CSTA	0.00844552
205043_at	1080	CFTR	0.00786266
205044_at	2568	GABRP	0.00572145
205267_at	5450	POU2AF1	0.00031308
205614_x_at	4485	MST1	0.00900122
205624_at	1359	CPA3	0.00540468
205683_x_at	7177	TPSAB1	0.00200423
205685_at	942	CD86	0.00619892
205798_at	3575	IL7R	0.00028458
205831_at	914	CD2	0.00602706
205963_s_at	9093	DNAJA3	0.00642044
205985_x_at	1188	CLCNKB	0.00834943
206087_x_at	3077	HFE	0.00438011
206150_at	939	CD27	0.00377333
206254_at	1950	EGF	0.00115166
206303_s_at	11163	NUDT4	0.00451959
206336_at	6372	CXCL6	0.00018591
206545_at	940	CD28	0.00424974
206666_at	3003	GZMK	0.00573883
206716_at	7369	UMOD	0.00912289

207047_s_at	NA		NA	0.00239907
207134_x_at		64499	TPSB2	0.0017317
207735_at		54941	RNF125	0.00346154
207741_x_at		7177	TPSAB1	0.0030106
207791_s_at		5861	RAB1A	0.00689277
207981_s_at		2104	ESRRG	0.00564153
208580_x_at	NA		NA	0.00797878
208724_s_at		5861	RAB1A	0.00487827
208813_at		2805	GOT1	0.00055531
208891_at		1848	DUSP6	0.00274808
208892_s_at		1848	DUSP6	0.00302279
208904_s_at		6234	RPS28	0.00489732
208907_s_at		28973	MRPS18B	0.00487981
208911_s_at		5162	PDHB	0.00590183
208968_s_at		57019	CIAPIN1	0.00539367
208969_at		4704	NDUFA9	0.00525061
209083_at		11151	CORO1A	0.00538303
209138_x_at	NA		NA	0.00311378
209173_at		10551	AGR2	0.00015254
209209_s_at		10979	FERMT2	0.00352973
209584_x_at		27350	APOBEC3C	0.00288745
209670_at		28755	TRAC	0.00995608
209765_at		8728	ADAM19	0.005036
209835_x_at		960	CD44	0.00050354
209901_x_at		199	AIF1	0.00935336
210115_at		116832	RPL39L	0.00295127
210165_at		1773	DNASE1	0.00920255
210356_x_at		931	MS4A1	0.00692383
210716_s_at		6249	CLIP1	0.00384453
210889_s_at		2213	FCGR2B	0.00041802
210915_x_at		28639	TRBC1	0.0001973
210916_s_at		960	CD44	0.00154886
210976_s_at		5213	PFKM	0.00262872
211339_s_at		3702	ITK	0.00126831
211430_s_at	NA		NA	0.00848156
211493_x_at		1837	DTNA	0.00535534
211633_x_at		3500	IGHG1	0.00253636
211634_x_at	NA		NA	0.00171558
211637_x_at	NA		NA	0.00505071
211643_x_at	NA		NA	0.00591674
211644_x_at	NA		NA	0.00723622
211645_x_at	NA		NA	0.00071353
211663_x_at		5730	PTGDS	0.00522282
211742_s_at		2124	EVI2B	0.00837965
211796_s_at	NA		NA	0.00300092
211798_x_at		28831	IGLJ3	0.00588095

211908_x_at	NA		NA	0.00844566
212014_x_at		960	CD44	0.00146582
212038_s_at		7416	VDAC1	0.00331011
212181_s_at	NA		NA	0.00125853
212294_at		55970	GNG12	0.00802675
212381_at		23358	USP24	0.00601349
212441_at		9778	KIAA0232	0.00741631
212587_s_at		5788	PTPRC	0.00607012
212592_at		3512	IGJ	0.00137614
212692_s_at		987	LRBA	0.00679148
213095_x_at		199	AIF1	0.00254542
213149_at		1737	DLAT	0.00424718
213173_at		22990	PCNX	0.00663235
213193_x_at		28639	TRBC1	0.00047712
213332_at		60676	PAPPA2	0.00550934
213502_x_at		91316	LOC91316	0.00361235
213539_at		915	CD3D	0.00576477
213566_at		6039	RNASE6	0.00879081
213603_s_at		5880	RAC2	0.00541158
213812_s_at		10645	CAMKK2	0.00305364
214129_at		9659	PDE4DIP	0.00885562
214264_s_at		90141	EFCAB11	0.00486989
214394_x_at		1936	EEF1D	0.00457685
214433_s_at		8991	SELENBP1	0.0058291
214669_x_at		3514	IGKC	0.00280714
214677_x_at	NA		NA	0.00466077
214768_x_at	NA		NA	0.0082762
214777_at		28908	IGKV4-1	0.00661055
214836_x_at	NA		NA	0.00448749
215051_x_at		199	AIF1	0.00862536
215121_x_at	NA		NA	0.00530736
215176_x_at	NA		NA	0.00230352
215379_x_at	NA		NA	0.00240417
215772_x_at		8801	SUCLG2	0.00718699
215946_x_at		91353	IGLL3P	0.00080191
216354_at	NA		NA	0.00935115
216380_x_at	NA		NA	0.00305384
216401_x_at	NA		NA	0.00110304
216412_x_at	NA		NA	0.00525238
216474_x_at	NA		NA	0.00253283
216510_x_at	NA		NA	0.00431737
216516_at	NA		NA	0.00938896
216557_x_at	NA		NA	0.00737705
216560_x_at		3535	IGL@	0.00231689
216576_x_at	NA		NA	0.00123148
216984_x_at	NA		NA	0.00137383

217022_s_at	NA		NA	0.00207962
217028_at		7852	CXCR4*	0.00141451
217147_s_at		50852	TRAT1	0.00629247
217148_x_at		100423062	IGLL5	0.00051603
217157_x_at	NA		NA	0.00540164
217235_x_at	NA		NA	0.00029551
217378_x_at	NA		NA	0.00481306
217520_x_at	NA		NA	0.00040494
217794_at		54458	PRR13	0.00279905
217955_at		23786	BCL2L13	0.00412831
218024_at		51660	BRP44L	0.00352391
218035_s_at		54502	RBM47	0.00295235
218187_s_at		65265	C8orf33	0.0067588
218382_s_at		11338	U2AF2	0.00987612
218806_s_at		10451	VAV3	0.00348047
218960_at		56649	TMPRSS4	0.00344303
219118_at		51303	FKBP11	0.0086312
219257_s_at		8877	SPHK1	0.00996572
219675_s_at		80146	UXS1	0.00668708
219799_s_at		10170	DHRS9	0.00758731
219939_s_at		7812	CSDE1	0.00905973
220357_s_at		10110	SGK2	0.00025892
220419_s_at		29761	USP25	0.0018712
220999_s_at		26999	CYFIP2	0.00843561
221504_s_at		51606	ATP6V1H	0.00562381
221651_x_at	NA		NA	0.00736543
221671_x_at	NA		NA	0.00784994
221767_x_at		3069	HDLBP	0.00494125
221925_s_at		79848	CSPP1	0.00896654
34210_at		1043	CD52	0.0034563
40420_at		6793	STK10	0.00263086
57715_at		51063	CALHM2	0.00637488
64064_at		55340	GIMAP5	0.00679567

* Genes validated using RT-qPCR

Supplemental Table 4 – Complete list of differentially expressed genes identified across all comparisons. Only genes with p-values <0.01 in at least one of the comparisons have been listed.

AffyID	Entrez ID	Gene Symbol	nDGF _{lo} vs nDGF _{hi}		DGF _{lo} vs DGF _{hi}		DGF _{lo} vs nDGF _{lo}		DGF _{hi} vs nDGF _{hi}	
			p-value	Avg. Fold Change	p-value	Avg. Fold Change	p-value	Avg. Fold Change	p-value	Avg. Fold Change
200001_at	826	CAPNS1	0.00547	-1.31			0.00047	1.56		
200059_s_at	387	RHOA	0.00171	-1.15			0.01170	1.16		
200065_s_at	375	ARF1	0.00092	-1.22			0.00250	1.27		
200600_at	4478	MSN	0.00546	-1.23	0.03654	1.24	0.00129	1.37		
200614_at	1213	CLTC	0.00327	-1.10						
200643_at	3069	HDLBP	0.00094	-1.23			0.00964	1.24		
200668_s_at	7323	UBE2D3	0.00073	-1.12			0.01774	1.11		
200691_s_at	3313	HSPA9	0.00097	-1.32	0.04923	-1.25				
200738_s_at	5230	PGK1	0.00268	-1.10						
200764_s_at	1495	CTNNA1	0.00107	-1.25			0.01188	1.24	0.02338	-1.18
200814_at	5720	PSME1	0.01498	-1.12	0.02879	1.15	0.00056	1.23		
200901_s_at	4074	M6PR	0.00402	-1.19			0.00185	1.27		
200973_s_at	10099	TSPAN3	0.00112	-1.26			0.01170	1.26		
201030_x_at	3945	LDHB			0.00090	-1.21	0.03382	-1.12	0.02689	1.11
201044_x_at	1843	DUSP1	0.03044	-1.21	0.02377	1.32	0.00038	1.52		
201060_x_at	2040	STOM	0.00209	-1.30			0.00036	1.49		
201082_s_at	1639	DCTN1	0.00293	-1.40			0.00265	1.55		
201118_at	5226	PGD	0.00094	-1.31			0.04792	1.23		
201137_s_at	3115	HLA-DPB1			0.00003	2.42	0.00170	1.84	0.03123	-1.43
201175_at	51075	TXNDC14	0.02438	-1.12	0.03187	-1.16				
201231_s_at	2023	ENO1	0.00131	-1.21					0.00239	-1.23
201337_s_at	9341	VAMP3	0.00134	-1.41			0.00549	1.47		
201444_s_at	10159	ATP6AP2	0.00036	-1.25			0.01419	1.22		
201445_at	1266	CNN3	0.00153	-1.69			0.00392	1.85		
201519_at	9868	TOMM70A			0.00065	-1.29				
201539_s_at	2273	FHL1			0.00411	1.39	0.01111	1.31	0.01943	-1.24
201583_s_at	10483	SEC23B	0.00061	-1.29						
201621_at	4681	NBL1			0.03246	1.20	0.00064	1.31		
201666_at	7076	TIMP1			0.00081	2.12	0.03323	1.55	0.00488	-1.65
201698_s_at	8683	SFRS9	0.00152	-1.20			0.00607	1.23		
201716_at	6642	SNX1	0.00148	-1.25			0.00119	1.35		

201720_s_at	7805	LAPTM5			0.00169	1.76	0.00624	1.58		
201721_s_at	7805	LAPTM5			0.00042	1.97	0.02109	1.50		
201731_s_at	7175	TPR	0.01290	-1.13					0.00405	-1.17
201742_x_at	6426	SFRS1	0.00222	-1.47			0.01271	1.50	0.04997	-1.31
201743_at	929	CD14			0.00077	2.38	0.02512	1.70	0.00504	-1.78
201781_s_at	9049	AIP	0.01678	-1.19			0.00078	1.39		
201800_s_at	5007	OSBP	0.03933	-1.10	0.00652	-1.19				
201841_s_at	3315	HSPB1	0.02479	-1.31			0.00052	1.73		
201929_s_at	8502	PKP4	0.00150	-1.37			0.02015	1.34		
201954_at	10095	ARPC1B			0.00179	1.66	0.01438	1.44	0.01221	-1.38
201988_s_at	1389	CREBL2	0.00300	-1.23			0.00083	1.36		
202101_s_at	5899	RALB	0.00158	-1.26			0.00881	1.28		
202119_s_at	8895	CPNE3	0.02131	-1.16	0.00320	-1.30				
202137_s_at	10771	ZMYND11	0.00090	-1.32						
202206_at	10123	ARL4C			0.00293	1.44				
202207_at	10123	ARL4C			0.00031	2.25				
202208_s_at	10123	ARL4C			0.00391	1.31				
202237_at	4837	NNMT			0.00031	3.39	0.00513	2.39		
202238_s_at	4837	NNMT			0.00012	3.46	0.00013	3.16		
202479_s_at	28951	TRIB2	0.03524	-1.19					0.00220	-1.33
202508_s_at	6616	SNAP25	0.03226	1.07	0.00198	1.15				
202540_s_at	3156	HMGCR			0.00655	-1.52	0.00068	-1.63		
202761_s_at	23224	SYNE2	0.00105	-1.49			0.00840	1.51		
202779_s_at	27338	LOC731049			0.00315	1.26	0.01356	1.19		
202783_at	23530	NNT	0.01471	-1.21	0.01221	-1.32				
202791_s_at	9701	SAPS2	0.00156	-1.16			0.00022	1.26		
202803_s_at	3689	ITGB2			0.00056	1.66				
202959_at	4594	MUT			0.00067	-1.54	0.00406	-1.40		
202960_s_at	4594	MUT			0.00025	-1.46	0.02966	-1.23		
202996_at	57804	POLD4					0.00153	1.42		
203072_at	4643	MYO1E	0.00518	-1.16	0.01527	1.19	0.00156	1.24		
203293_s_at	3998	LMAN1	0.00065	-1.42						
203340_s_at	8604	SLC25A12	0.01723	-1.13					0.01011	-1.16
203392_s_at	1487	CTBP1	0.00540	-1.64			0.00027	2.35		
203427_at	25842	ASF1A			0.00589	-1.48	0.00278	-1.48		
203575_at	1459	CSNK2A2					0.00780	1.21		
203997_at	5774	PTPN3	0.00025	-1.24			0.00202	1.26		

204032_at	8412	BCAR3			0.00108	-1.57	0.00240	-1.47		
204034_at	23474	ETHE1					0.00179	1.35		
204057_at	3394	IRF8			0.00274	1.62	0.00134	1.62		
204118_at	962	CD48			0.00093	1.53	0.03673	1.28		
204156_at	23387	KIAA0999	0.00073	-1.38			0.00759	1.39		
204198_s_at	864	RUNX3			0.00019	1.25			0.03479	-1.10
204259_at	4316	MMP7			0.00024	2.51	0.04390	1.58	0.02360	-1.56
204388_s_at	4128	MAOA			0.00250	-1.48			0.00170	1.39
204389_at	4128	MAOA			0.00715	-1.45			0.01243	1.32
204508_s_at	771	CA12			0.00112	-1.43			0.00679	1.27
204655_at	6352	CCL5			0.00056	1.74				
204661_at	1043	CD52			0.00006	1.75	0.00422	1.44		
204670_x_at	100133484	HLA-DRB1			0.00327	1.55	0.00248	1.53		
204698_at	3669	ISG20			0.00895	1.44	0.00936	1.40		
205012_s_at	3029	HAGH			0.04209	-1.25			0.00105	1.34
205267_at	5450	POU2AF1	0.00656	1.23	0.01140	1.31				
205683_x_at	64499	TPSAB1			0.00056	1.52	0.00222	1.41		
205769_at	11001	SLC27A2			0.00898	-1.57			0.00089	1.59
205776_at	2330	FMO5			0.00137	-2.05			0.00408	1.67
205798_at	3575	IL7R			0.00009	1.93	0.02098	1.42		
206042_x_at	6638	SNRPN	0.00380	-1.21			0.00156	1.31		
206045_s_at	8715	NOL4	0.00655	1.10	0.02601	-1.12	0.00013	-1.20		
206085_s_at	1491	CTH			0.00910	-1.63			0.00498	1.52
206254_at	1950	EGF			0.00048	-2.90				
206336_at	6372	CXCL6			0.00006	2.23	0.00114	1.82		
206343_s_at	3084	NRG1			0.00064	-1.76			0.00722	1.42
206392_s_at	5918	RARRES1	0.01125	-1.77	0.04316	1.87	0.00085	2.68		
206491_s_at	8775	NAPA	0.00326	-1.24			0.00183	1.35		
206666_at	3003	GZMK			0.00428	1.42				
206698_at	7504	XK			0.00106	-1.27	0.04316	-1.15	0.00474	1.18
206783_at	2249	FGF4	0.00788	1.14	0.03460	-1.15	0.00027	-1.26		
207134_x_at	64499	TPSB2			0.00016	1.56	0.00195	1.40		
207174_at	2262	GPC5			0.00139	-2.72	0.00037	-2.84		
207238_s_at	5788	PTPRC			0.00057	1.75	0.01780	1.42		
207628_s_at	114049	WBSCR22	0.00259	-1.18			0.02815	1.17	0.02293	-1.15
207741_x_at	7177	TPSAB1			0.00428	1.36				
207981_s_at	2104	ESRRG			0.00153	-1.43	0.00299	-1.37		

208076_at	121504	HIST1H4A	0.00053	1.15			0.00997	-1.14		
208306_x_at	3123	HLA-DRB1			0.00026	1.62	0.00092	1.50		
208580_x_at	121504	HIST1H4A	0.00292	1.17					0.03481	1.13
208643_s_at	7520	XRCC5	0.00173	-1.19					0.03374	-1.14
208675_s_at	1650	DDOST	0.00242	-1.30	0.03525	1.29	0.00054	1.49		
208679_s_at	10109	ARPC2	0.03776	-1.10	0.00062	1.24	0.00430	1.18	0.00466	-1.15
208680_at	5052	PRDX1	0.00284	-1.21			0.00113	1.31		
208686_s_at	6046	BRD2	0.00433	-1.39			0.00263	1.57		
208703_s_at	334	APLP2	0.00108	-1.50			0.00212	1.64		
208729_x_at	3106	HLA-B			0.00052	1.71	0.00153	1.57		
208811_s_at	10049	DNAJB6	0.00139	-1.28			0.00755	1.30		
208813_at	2805	GOT1	0.00756	-1.22						
208845_at	7419	VDAC3			0.00701	-1.27	0.00017	-1.37		
208884_s_at	51366	UBR5	0.00078	-1.23			0.02013	1.20		
208887_at	8666	EIF3G			0.00811	1.22	0.00184	1.25		
208894_at	3122	HLA-DRA	0.03761	-1.28	0.00469	1.60	0.00038	1.74		
208905_at	54205	CYCS			0.00220	-1.26	0.00298	-1.23		
208971_at	7389	UROD	0.02650	-1.14			0.00098	1.30		
208973_at	79033	ERI3	0.02221	-1.26			0.00128	1.53		
208991_at	6774	STAT3	0.01272	-1.24	0.01113	1.35	0.01958	1.29	0.00743	-1.29
208992_s_at	6774	STAT3	0.01024	-1.27	0.00521	1.43	0.00319	1.43	0.01896	-1.27
209040_s_at	5696	PSMB8			0.00100	1.66	0.00354	1.52	0.03151	-1.30
209073_s_at	8650	NUMB	0.00194	-1.25			0.00043	1.39		
209138_x_at	3535	IGL@			0.00019	5.34	0.02785	2.45		
209140_x_at	3106	HLA-B			0.00207	1.43	0.00377	1.37		
209173_at	10551	AGR2	0.00224	1.72	0.04424	1.64				
209209_s_at	10979	FERMT2	0.00118	-1.32						
209217_s_at	11152	WDR45					0.00085	1.31		
209312_x_at	100133484	HLA-DRB1			0.00025	1.81	0.00088	1.64	0.03948	-1.30
209417_s_at	3430	IFI35	0.02891	-1.26			0.00076	1.61		
209480_at	3119	HLA-DQB1			0.00490	3.02	0.00539	2.77		
209584_x_at	27350	APOBEC3C	0.02617	1.13	0.01022	1.21				
209625_at	5283	PIGH			0.00049	-1.40			0.02731	1.18
209712_at	23169	SLC35D1			0.01522	-1.40			0.00630	1.36
209795_at	969	CD69			0.00171	1.56	0.00889	1.41		
209835_x_at	960	CD44	0.03016	1.19	0.00102	1.45				
210006_at	25864	ABHD14A			0.00342	-1.52			0.00109	1.45

210072_at	6363	CCL19			0.00043	3.74				
210084_x_at	7177	TPSAB1			0.00069	1.48	0.00213	1.39		
210115_at	116832	RPL39L	0.00044	1.14			0.03608	-1.10		
210397_at	1672	DEFB1			0.00446	-1.44	0.00079	-1.50		
210402_at	3758	KCNJ1			0.00414	-1.48	0.01085	-1.39		
210640_s_at	2852	GPER			0.00248	-1.36			0.00014	1.37
210732_s_at	3964	LGALS8	0.00715	-1.26					0.00327	-1.33
210764_s_at	3491	CYR61			0.00055	2.00	0.01482	1.56	0.02471	-1.43
210889_s_at	2213	FCGR2B			0.00026	1.87				
210915_x_at	28639	TRBC1			0.00004	1.81	0.04606	1.29		
210916_s_at	960	CD44			0.00402	1.21				
210978_s_at	8407	TAGLN2	0.03012	-1.32	0.00381	1.69	0.00480	1.61	0.02322	-1.39
210982_s_at	3122	HLA-DRA			0.00260	1.64	0.00037	1.73		
210992_x_at	9103	FCGR2C			0.00183	1.36	0.00322	1.31		
211395_x_at	9103	FCGR2C			0.00020	1.52	0.00104	1.41		
211430_s_at	28396	IGH@			0.00061	6.08	0.02882	2.86		
211529_x_at	3135	HLA-G			0.00363	1.39	0.00218	1.39		
211530_x_at	3135	HLA-G			0.00132	1.36	0.00768	1.27		
211644_x_at	28875	IGK@			0.00260	2.74	0.04874	1.83		
211645_x_at	0	Affy_211645_x_at			0.00044	3.53				
211654_x_at	3119	HLA-DQB1			0.00025	2.28	0.00011	2.26		
211749_s_at	9341	VAMP3	0.00030	-1.26			0.00148	1.30		
211755_s_at	515	ATP5F1			0.00162	-1.26	0.00629	-1.20		
211796_s_at	28638	TRBC1			0.00044	1.74	0.01185	1.44		
211798_x_at	28831	IGLJ3			0.00234	1.99	0.04677	1.51		
211799_x_at	3107	HLA-C			0.00198	1.56	0.00161	1.52		
211864_s_at	26509	MYOF			0.00637	1.55			0.00086	-1.55
211911_x_at	3106	HLA-B			0.00090	1.66	0.00051	1.65		
211991_s_at	3113	HLA-DPA1			0.00108	1.98	0.00252	1.80		
212008_at	23190	UBXN4	0.00117	-1.41			0.02053	1.37		
212014_x_at	960	CD44	0.04942	1.13	0.00312	1.30				
212025_s_at	2314	FLII	0.00183	-1.33			0.00113	1.47		
212181_s_at	11163	NUDT4	0.03382	-1.22	0.00661	-1.43				
212196_at	3572	IL6ST	0.00249	-1.30			0.01447	1.31	0.04688	-1.21
212281_s_at	27346	TMEM97					0.00121	-2.01		
212282_at	27346	TMEM97					0.00172	-1.78		
212381_at	23358	USP24	0.03907	-1.21						

212422_at	22984	PDCD11			0.00999	1.15			0.00009	-1.19
212510_at	23171	GPD1L			0.00019	-1.51			0.00845	1.26
212568_s_at	1737	DLAT			0.01125	-1.36	0.02402	-1.29		
212584_at	9716	AQR	0.00159	-1.16			0.03833	1.13		
212587_s_at	5788	PTPRC			0.00023	2.44				
212588_at	5788	PTPRC			0.00063	2.68	0.04733	1.68		
212592_at	3512	IGJ			0.00031	5.70	0.01997	2.78		
212796_s_at	23102	TBC1D2B			0.00174	1.35	0.00911	1.26	0.02613	-1.19
212914_at	23492	CBX7					0.00191	1.35		
212998_x_at	3119	HLA-DQB1			0.00262	2.43	0.00355	2.23		
212999_x_at	3119	HLA-DQB1			0.00167	2.20	0.00157	2.09		
213149_at	1737	DLAT			0.00131	-1.48	0.00587	-1.36		
213193_x_at	28639	TRBC1			0.00084	1.39				
213321_at	594	BCKDHB			0.00006	-1.59			0.00105	1.35
213502_x_at	91316	LOC91316			0.00280	1.87				
213539_at	915	CD3D			0.00047	1.46	0.04080	1.22		
213603_s_at	5880	RAC2			0.00012	1.76	0.04786	1.30	0.04116	-1.26
213831_at	3117	HLA-DQA1			0.00669	3.00	0.00298	3.09		
213872_at	0	Affy_213872_at	0.00263	-1.61			0.01504	1.64		
214023_x_at	347733	TUBB2B			0.01390	-1.77	0.00117	-2.03		
214073_at	2017	CTTN	0.00419	1.37	0.03107	-1.39			0.00107	1.50
214164_x_at	771	CA12			0.00005	-1.38	0.01195	-1.20	0.00356	1.20
214359_s_at	3326	HSP90AB1	0.00237	-1.42			0.00253	1.57		
214382_at	54346	UNC93A	0.00883	1.19	0.02930	-1.22	0.00090	-1.33		
214505_s_at	2273	FHL1	0.03780	-1.21	0.00735	1.42	0.00348	1.43		
214669_x_at	3514	IGKC			0.00023	3.92	0.01977	2.20		
214677_x_at	3535	IGL@			0.00027	6.02	0.02687	2.70		
214777_at	28908	IGKV4-1			0.00181	2.20				
214836_x_at	3514	IGKC			0.00053	2.76	0.02017	1.86		
214875_x_at	334	APLP2	0.00103	-1.39			0.00425	1.45		
215121_x_at	28815	IGL@			0.00033	4.51	0.02521	2.35		
215176_x_at	100130100	LOC100130100			0.00038	4.37	0.02234	2.38		
215185_at	0	Affy_215185_at			0.00118	1.44	0.01426	1.29		
215193_x_at	100133484	HLA-DRB1			0.00018	1.86	0.00038	1.73		
215207_x_at	11049	LOC646208	0.00084	-1.23			0.00334	1.26		
215343_at	440193	CCDC88C			0.03190	-1.22			0.00083	1.29
215379_x_at	28815	IGL@			0.00017	4.69	0.01988	2.39		

215399_s_at	10956	OS9	0.01030	-1.20			0.00103	1.35		
215489_x_at	9454	HOMER3			0.00265	1.83	0.01398	1.58		
215646_s_at	1462	VCAN			0.00099	2.94			0.01282	-1.91
215785_s_at	26999	CYFIP2			0.01358	-1.50	0.01896	-1.43		
215867_x_at	771	CA12			0.00028	-1.34	0.01524	-1.20	0.01402	1.17
215946_x_at	91353	IGLL3			0.00030	2.71	0.03235	1.71		
215952_s_at	4946	OAZ1	0.00520	-1.21			0.00097	1.34		
215987_at	9693	RAPGEF2					0.00145	-1.12		
216041_x_at	2896	GRN	0.03332	-1.23	0.01043	1.43	0.00227	1.49		
216401_x_at	652493	LOC652493			0.00110	2.68				
216474_x_at	64499	TPSAB1			0.00019	1.60	0.01044	1.34		
216516_at	0	Affy_216516_at	0.00066	1.10			0.02506	-1.08		
216576_x_at	28299	IGKC			0.00091	2.96				
216593_s_at	5279	PIGC	0.01996	-1.12					0.00318	-1.17
216640_s_at	10130	PDIA6	0.00305	-1.33			0.00307	1.44		
216697_at	7204	TRIO							0.00080	-1.10
216755_at	114884	OSBPL10	0.00552	1.16			0.00182	-1.25		
216984_x_at	28813	IGLV2-11			0.00131	2.00				
217022_s_at	100126583	IGH@			0.00008	6.43	0.01432	2.86		
217028_at	7852	CXCR4			0.00974	1.78				
217148_x_at	3535	IGL@			0.00039	2.30	0.02411	1.62		
217235_x_at	28813	IGL@			0.00084	1.72				
217294_s_at	2023	ENO1	0.00368	-1.50	0.03353	1.51			0.00231	-1.61
217356_s_at	5230	PGK1	0.00020	-1.30			0.01859	1.24		
217456_x_at	3133	HLA-E			0.00049	1.47	0.00843	1.31	0.03561	-1.20
217478_s_at	3108	HLA-DMA			0.00037	1.76	0.00270	1.55		
217520_x_at	731884	LOC731884	0.00247	1.22						
217747_s_at	6203	RPS9			0.00032	1.38	0.03496	1.19	0.01441	-1.19
217750_s_at	65264	UBE2Z			0.00774	1.23	0.00106	1.27		
217774_s_at	51504	HSPC152					0.00085	1.25		
217794_at	54458	PRR13	0.00408	-1.16						
217839_at	10342	TFG	0.00052	-1.17			0.00600	1.17		
217871_s_at	284889	LOC284889					0.00215	1.28		
217993_s_at	27430	MAT2B	0.01428	-1.13			0.01939	1.17	0.01256	1.15
218024_at	51660	BRP44L			0.00010	-1.41	0.00381	-1.27		
218027_at	29088	MRPL15			0.00735	-1.22	0.00296	-1.23		
218074_at	51647	FAM96B	0.04935	-1.13			0.00270	1.27		

218170_at	51015	ISOC1			0.00087	-1.44	0.01884	-1.27		
218192_at	51447	IP6K2	0.00120	-1.17	0.03921	1.15	0.00092	1.24		
218546_at	79762	C1orf115			0.00031	-1.38			0.00013	1.32
218568_at	55750	AGK			0.00455	-1.42	0.00547	-1.37		
218772_x_at	55151	TMEM38B			0.00171	-1.63	0.00993	-1.45		
219076_s_at	5827	PXMP2			0.00015	-1.90	0.01582	-1.45	0.01229	1.39
219118_at	51303	FKBP11			0.00074	1.66	0.01835	1.39		
219195_at	10891	PPARGC1A			0.04228	-1.32	0.00564	-1.43		
220099_s_at	51631	LUC7L2	0.00125	-1.20			0.00721	1.21		
220357_s_at	10110	SGK2	0.03656	-1.13	0.00452	-1.27				
220532_s_at	28959	TMEM176B	0.00318	-1.37			0.00254	1.53		
221523_s_at	58528	RRAGD			0.00281	-1.72	0.00025	-1.88		
221524_s_at	58528	RRAGD					0.00092	-1.56		
221581_s_at	7462	LAT2			0.00083	1.31	0.04917	1.15	0.04673	-1.13
221589_s_at	4329	ALDH6A1			0.01170	-1.51			0.00045	1.60
221601_s_at	9214	FAIM3			0.00105	1.42	0.01706	1.27		
221627_at	10107	TRIM10			0.00214	-1.39			0.00113	1.32
221651_x_at	3514	IGK@			0.00036	3.84	0.02313	2.19		
221671_x_at	3514	IGK@			0.00030	3.97	0.02195	2.22		
221875_x_at	3134	HLA-F			0.00075	1.55	0.01063	1.36		
222056_s_at	51011	FAHD2A	0.01992	1.21	0.01091	-1.35	0.00247	-1.39		
222065_s_at	2314	FLII	0.00380	-1.29			0.00406	1.39		
34210_at	1043	CD52			0.00011	2.13	0.00918	1.59		
34868_at	23381	SMG5	0.02385	-1.13			0.00381	1.22		
46665_at	54910	SEMA4C			0.00356	1.30	0.01538	1.22		

Supplemental Table 5 – List of biological processes identified by ToppGene. Gene ontology categories with identical redundant gene lists have been removed.

Name	p-value	Hit Count in Query	Hit Count in Genome	Hit in Query List
nDGF_{lo} vs nDGF_{hi}				
intracellular transport	1.68E-02	14	867	M6PR,RHOA,PRDX1,NAPA,HSPA9,SEC23B,UBR5,SRSF9,SRSF1,SNX1,ARF1,VAMP3,LMAN1,CLTC
cellular protein localization	2.96E-02	11	609	M6PR,RHOA,PRDX1,SYNE2,NAPA,HSPA9,SEC23B,UBR5,RALB,SNX1,CLTC
Golgi vesicle transport	3.31E-02	6	149	NAPA,SEC23B,SNX1,ARF1,LMAN1,CLTC
DGF_{lo} vs DGF_{hi}				
interferon-gamma-mediated signaling pathway	5.48E-13	13	72	IRF8,HLA-G,HLA-F,HLA-E,HLA-DRB1,HLA-DRA,HLA-DPB1,HLA-DPA1,HLA-DQB1,HLA-DQA1,HLA-B,CD44,HLA-DMA
antigen processing and presentation	5.48E-13	13	74	PSMB8,FCGR2B,HLA-G,HLA-F,HLA-E,HLA-DRB1,HLA-DRA,HLA-DPB1,HLA-DPA1,HLA-DQB1,HLA-DQA1,HLA-B,HLA-DMA
cytokine-mediated signaling pathway	1.18E-12	18	234	PSMB8,IL7R,IRF8,ISG20,PTPRC,STAT3,HLA-G,HLA-F,HLA-E,HLA-DRB1,HLA-DRA,HLA-DPB1,HLA-DPA1,HLA-DQB1,HLA-DQA1,HLA-B,CD44,HLA-DMA
immune response	2.58E-12	29	886	IGKV4-1,IL7R,FCGR2B,CXCL6,CCL19,CCL5,IGJ,IRF8,ITGB2,CD14,CD3D,LAT2,PTPRC,CFH,HLA-G,HLA-F,HLA-E,HLA-DRB1,HLA-DRA,DEFB1,MMP7,HLA-DPB1,FCGR2C,HLA-DPA1,HLA-DQB1,HLA-DQA1,HLA-B,TRBC1,HLA-DMA
immune system process	1.07E-11	35	1450	IGKV4-1,PSMB8,TIMP1,IL7R,FCGR2B,TRIM10,CXCL6,CCL19,CCL5,IGJ,CXCR4,IRF8,ITGB2,CD14,CD3D,LAT2,PTPRC,CFH,HLA-G,HLA-F,HLA-E,HLA-DRB1,HLA-DRA,DEFB1,MMP7,HLA-DPB1,FCGR2C,HLA-DPA1,HLA-DQB1,HLA-DQA1,HLA-B,CD48,CD44,TRBC1,HLA-DMA
regulation of immune response	3.57E-10	20	447	IGKV4-1,IL7R,FCGR2B,ITGB2,CD3D,LAT2,PTPRC,CFH,HLA-G,HLA-F,HLA-E,HLA-DRB1,HLA-DRA,HLA-DPB1,HLA-DPA1,HLA-DQB1,HLA-DQA1,HLA-B,TRBC1,HLA-DMA
antigen processing and presentation of peptide antigen	5.66E-10	9	38	FCGR2B,HLA-G,HLA-F,HLA-E,HLA-DRB1,HLA-DQB1,HLA-DQA1,HLA-B,HLA-DMA

antigen processing and presentation of peptide or polysaccharide antigen via MHC class II	7.13E-10	8	25	FCGR2B,HLA-DRB1,HLA-DRA,HLA-DPB1,HLA-DPA1,HLA-DQB1,HLA-DQA1,HLA-DMA
regulation of response to stimulus	1.23E-08	24	847	IGKV4-1,IL7R,FCGR2B,CCL5,CXCR4,ITGB2,CD3D,SEMA4C,LAT2,PTPRC,CFH,HLA-G,HLA-F,HLA-E,HLA-DRB1,HLA-DRA,HLA-DPB1,HLA-DPA1,HLA-DQB1,HLA-DQA1,HLA-B,CD44,TRBC1,HLA-DMA
regulation of immune system process	1.71E-08	22	710	IGKV4-1,IL7R,FCGR2B,CCL5,ITGB2,CD3D,LAT2,PTPRC,CFH,HLA-G,HLA-F,HLA-E,HLA-DRB1,HLA-DRA,HLA-DPB1,HLA-DPA1,HLA-DQB1,HLA-DQA1,HLA-B,CD44,TRBC1,HLA-DMA
antigen receptor-mediated signaling pathway	1.75E-08	11	111	CD3D,LAT2,PTPRC,HLA-DRB1,HLA-DRA,HLA-DPB1,HLA-DPA1,HLA-DQB1,HLA-DQA1,TRBC1,HLA-DMA
T cell activation	3.55E-08	15	292	IL7R,CXCR4,ITGB2,CD3D,PTPRC,HLA-G,HLA-DRB1,HLA-DRA,HLA-DPB1,HLA-DPA1,HLA-DQB1,HLA-DQA1,CD48,TRBC1,HLA-DMA
T cell receptor signaling pathway	3.55E-08	10	89	CD3D,PTPRC,HLA-DRB1,HLA-DRA,HLA-DPB1,HLA-DPA1,HLA-DQB1,HLA-DQA1,TRBC1,HLA-DMA
lymphocyte activation	5.37E-08	17	421	IL7R,FCGR2B,CXCR4,ITGB2,CD3D,LAT2,PTPRC,HLA-G,HLA-DRB1,HLA-DRA,HLA-DPB1,HLA-DPA1,HLA-DQB1,HLA-DQA1,CD48,TRBC1,HLA-DMA
lymphocyte costimulation	7.64E-08	9	70	CD3D,HLA-DRB1,HLA-DRA,HLA-DPB1,HLA-DPA1,HLA-DQB1,HLA-DQA1,TRBC1,HLA-DMA
positive regulation of T cell activation	2.17E-07	11	147	IL7R,CD3D,PTPRC,HLA-DRB1,HLA-DRA,HLA-DPB1,HLA-DPA1,HLA-DQB1,HLA-DQA1,TRBC1,HLA-DMA
antigen processing and presentation of exogenous peptide antigen	3.00E-07	6	19	FCGR2B,HLA-G,HLA-DRB1,HLA-DQB1,HLA-DQA1,HLA-DMA
cell activation	5.18E-07	20	720	TIMP1,IL7R,FCGR2B,CXCR4,ITGB2,CD3D,RAC2,LAT2,PTPRC,HLA-G,EGF,HLA-DRB1,HLA-DRA,HLA-DPB1,HLA-DPA1,HLA-DQB1,HLA-DQA1,CD48,TRBC1,HLA-DMA
activation of immune response	6.03E-07	13	260	IGKV4-1,CD3D,LAT2,PTPRC,CFH,HLA-DRB1,HLA-DRA,HLA-DPB1,HLA-DPA1,HLA-DQB1,HLA-DQA1,TRBC1,HLA-DMA
positive regulation of immune response	8.40E-07	14	324	IGKV4-1,CD3D,LAT2,PTPRC,CFH,HLA-G,HLA-DRB1,HLA-DRA,HLA-DPB1,HLA-DPA1,HLA-DQB1,HLA-DQA1,TRBC1,HLA-DMA
positive regulation of response to stimulus	1.86E-06	16	477	IGKV4-1,CCL5,CD3D,SEMA4C,LAT2,PTPRC,CFH,HLA-G,HLA-DRB1,HLA-DRA,HLA-DPB1,HLA-DPA1,HLA-DQB1,HLA-DQA1,TRBC1,HLA-DMA

positive regulation of immune system process	1.90E-06	16	479	IGKV4-1,IL7R,CCL5,CD3D,LAT2,PTPRC,CFH,HLA-G,HLA-DRB1,HLA-DRA,HLA-DPB1,HLA-DPA1,HLA-DQB1,HLA-DQA1,TRBC1,HLA-DMA
antigen processing and presentation of exogenous peptide antigen via MHC class II	2.00E-06	5	13	FCGR2B,HLA-DRB1,HLA-DQB1,HLA-DQA1,HLA-DMA
regulation of lymphocyte activation	3.00E-06	12	249	IL7R,FCGR2B,CD3D,PTPRC,HLA-DRB1,HLA-DRA,HLA-DPB1,HLA-DPA1,HLA-DQB1,HLA-DQA1,TRBC1,HLA-DMA
defense response	3.02E-06	21	905	IGKV4-1,FCGR2B,CXCL6,CCL19,CCL5,CXCR4,FAIM3,IRF8,ITGB2,CD14,TPSB2,PTPRC,CFH,STAT3,HLA-G,DEFB1,TPSAB1,MMP7,HLA-B,CD48,CD44
type I interferon-mediated signaling pathway	2.39E-05	7	69	PSMB8,IRF8,ISG20,HLA-G,HLA-F,HLA-E,HLA-B
antigen processing and presentation of peptide antigen via MHC class I	1.26E-03	4	21	HLA-G,HLA-F,HLA-E,HLA-B
response to wounding	1.79E-03	18	1024	TIMP1,MYOF,FCGR2B,CXCL6,CCL19,CCL5,CXCR4,ITGB2,CD14,TPSB2,RAC2,NRG1,CFH,STAT3,VCAN,EGF,CD48,CD44
inflammatory response	3.27E-03	11	412	FCGR2B,CXCL6,CCL19,CCL5,CXCR4,ITGB2,CD14,TPSB2,CFH,STAT3,CD44
positive thymic T cell selection	3.37E-03	3	9	CD3D,PTPRC,HLA-DMA
humoral immune response	8.57E-03	6	114	IGKV4-1,FCGR2B,IGJ,PTPRC,CFH,MMP7
response to other organism	8.97E-03	11	464	FCGR2B,CCL19,CCL5,CXCR4,IRF8,CD14,ISG20,PTPRC,HLA-G,DEFB1,MMP7
negative regulation of leukocyte mediated immunity	1.60E-02	3	15	IL7R,FCGR2B,PTPRC
positive regulation of T cell differentiation	2.13E-02	4	44	IL7R,PTPRC,HLA-DQA1,HLA-DMA
regulation of T cell mediated cytotoxicity	2.15E-02	3	17	IL7R,PTPRC,HLA-G
leukocyte mediated immunity	2.53E-02	7	206	IGKV4-1,IL7R,FCGR2B,LAT2,PTPRC,HLA-G,HLA-DMA
negative regulation of T cell mediated cytotoxicity	3.65E-02	2	4	IL7R,PTPRC
T cell differentiation in thymus	4.77E-02	4	57	IL7R,CD3D,PTPRC,HLA-DMA
regulation of humoral immune response	4.77E-02	3	23	FCGR2B,PTPRC,CFH
DGF₁₀ vs nDGF₁₀				
interferon-gamma-mediated signaling pathway	3.94E-11	12	72	HSP90AB1,IRF8,HLA-G,HLA-E,HLA-DRB1,HLA-DRA,HLA-DPB1,HLA-DPA1,HLA-DQB1,HLA-DQA1,HLA-B,HLA-DMA

antigen processing and presentation	3.94E-11	12	74	PSMB8,PSME1,HLA-G,HLA-E,HLA-DRB1,HLA-DRA,HLA-DPB1,HLA-DPA1,HLA-DQB1,HLA-DQA1,HLA-B,HLA-DMA
cytokine-mediated signaling pathway	4.75E-11	17	234	PSMB8,HSP90AB1,IRF8,IFI35,ISG20,STAT3,HLA-G,IP6K2,HLA-E,HLA-DRB1,HLA-DRA,HLA-DPB1,HLA-DPA1,HLA-DQB1,HLA-DQA1,HLA-B,HLA-DMA
antigen processing and presentation of peptide or polysaccharide antigen via MHC class II	1.51E-07	7	25	HLA-DRB1,HLA-DRA,HLA-DPB1,HLA-DPA1,HLA-DQB1,HLA-DQA1,HLA-DMA
type I interferon-mediated signaling pathway	3.16E-07	9	69	PSMB8,HSP90AB1,IRF8,IFI35,ISG20,HLA-G,IP6K2,HLA-E,HLA-B
antigen processing and presentation of peptide antigen	2.48E-06	7	38	HLA-G,HLA-E,HLA-DRB1,HLA-DQB1,HLA-DQA1,HLA-B,HLA-DMA
antigen processing and presentation of exogenous antigen	4.57E-06	6	24	PSME1,HLA-G,HLA-DRB1,HLA-DQB1,HLA-DQA1,HLA-DMA
antigen processing and presentation of exogenous peptide antigen	6.61E-05	5	19	HLA-G,HLA-DRB1,HLA-DQB1,HLA-DQA1,HLA-DMA
antigen processing and presentation of exogenous peptide antigen via MHC class II	5.37E-04	4	13	HLA-DRB1,HLA-DQB1,HLA-DQA1,HLA-DMA
immune response	1.31E-03	18	886	DDOST,CXCL6,IRF8,PRDX1,IFI35,CFH,HLA-G,HLA-E,HLA-DRB1,HLA-DRA,DEFB1,HLA-DPB1,FCGR2C,HLA-DPA1,HLA-DQB1,HLA-DQA1,HLA-B,HLA-DMA
immune system process	2.48E-03	23	1450	PSMB8,PSME1,DDOST,MYO1E,MSN,CXCL6,ARF1,IRF8,PRDX1,IFI35,CFH,HLA-G,HLA-E,HLA-DRB1,HLA-DRA,DEFB1,HLA-DPB1,FCGR2C,HLA-DPA1,HLA-DQB1,HLA-DQA1,HLA-B,HLA-DMA
T cell activation	1.87E-02	9	292	DDOST,HLA-G,HLA-DRB1,HLA-DRA,HLA-DPB1,HLA-DPA1,HLA-DQB1,HLA-DQA1,HLA-DMA
regulation of immune response	1.91E-02	11	447	CFH,HLA-G,HLA-E,HLA-DRB1,HLA-DRA,HLA-DPB1,HLA-DPA1,HLA-DQB1,HLA-DQA1,HLA-B,HLA-DMA
positive regulation of immune response	3.79E-02	9	324	CFH,HLA-G,HLA-DRB1,HLA-DRA,HLA-DPB1,HLA-DPA1,HLA-DQB1,HLA-DQA1,HLA-DMA
activation of immune response	4.15E-02	8	260	CFH,HLA-DRB1,HLA-DRA,HLA-DPB1,HLA-DPA1,HLA-DQB1,HLA-DQA1,HLA-DMA
DGF_{hi} vs nDGF_{hi}				
No biological processes identified				