

SUPPLEMENTAL TABLE 1

Gene	Type	Gene	Type	Gene	Type
B3GAT1	NK/Tfh	FCGR3A	Fc Receptor	MYBL1	NK
BCL2	Apoptosis	FGFBP2	NK	PALMD	Endothelium
BCL6	Tfh/B	FOXP3	Treg	PDCD1	PD-1 CD279, Checkpoint
CAV1	Endothelium	GATA3	TH2	PECAM1	Endothelium
CCL5	T Cell Chemokine	GNLY	NK/CTL	PLA1A	Endothelium
CCR4	Chemokine Receptor	GZMB	NK/CTL	PLAT	Endothelium
CCR5	Chemokine Receptor	ICOS	TH2	PSMB10	IFNG Inducible
CD34	Endothelium	IFNA1	Cytokine	RHOJ	Endothelium
CD3D	T Cells	IFNG	Cytokine	ROBO4	Endothelium
CD4	T Cell Subset	IL10	M TH2 Treg B	RORyt (RORC)	Th17
CD68	Macrophage	IL17	Cytokine	RPS6	mTOR pathway
CD69	T NK Cells	IL1RL1	TH2, Receptor IL-33	RPS6KB1	mTOR pathway
CD74	Endothelium	IL2	Cytokine	SELE	Endothelium
CD8A	T Cell Subset, NK	IL21	Cytokine	SH2D1B	NK
CDH13	Endothelium	IL4	Cytokine	SOX7	Endothelium
CDH5	Endothelium	IL6R	Cytokine Receptor	TBX21	T-Bet IFNG Inducible
CLEC4C	DC	ITGAX	CD11c	TEK	Endothelium
CX3CR1	Chemokine Receptor	KLF4	Endothelium	TGFB1	Cytokine
CXCL11	IFNG Inducible Chemokine	KLRB1	NK	THBD	Endothelium
DARC	Endothelium	KLRF1	NK	TNF	Cytokine
EPO	Metabolic	MALL	Endothelium	TNFRSF18	GITR, Checkpoint
FAS	Apoptosis	MS4A1	CD20 B Cells	TRIB1	Inflammation
				VWF	Endothelium

SUPPLEMENTARY TABLE 2

GROUP			VALUE
CHRONIC ANTIBODY MEDIATED REJECTION	N		42
	DAYS POST TX	Minimum	98
	DAYS POST TX	Maximum	1951
	DAYS POST TX	Median	651.5
	Cr	Minimum	0.9
	Cr	Maximum	4.6
MIXED	Cr	Median	2.5
	N		86
	DAYS POST TX	Minimum	71
	DAYS POST TX	Maximum	2498
	DAYS POST TX	Median	358
	Cr	Minimum	1
NO PATHOLOGICAL REJECTION	Cr	Maximum	28
	Cr	Median	3.1
	N		55
	DAYS POST TX	Minimum	8
	DAYS POST TX	Maximum	5983
	DAYS POST TX	Median	385
NORMAL	Cr	Minimum	0.7
	Cr	Maximum	1.6
	Cr	Median	1.3
	N	N	18
	DAYS POST TX	Minimum	1
	DAYS POST TX	Maximum	16
ACUTE CELLULAR REJECTION	DAYS POST TX	Median	1
	Cr	Minimum	0.6
	Cr	Maximum	1.5
	Cr	Median	1
	N	N	77
	DAYS POST TX	Minimum	23
DAYS POST TX	Maximum	4327	
DAYS POST TX	Median	156	
Cr	Minimum	0.6	
Cr	Maximum	14	
Cr	Median	1.4	

SUPPLEMENTARY TABLE 3

GENE	TERM	SE	Prob> t	FDRPV	GENE	TERM	SE	Prob> t	FDRPV	GENE	TERM	SE	Prob> t	FDRPV
VWF	C4d	0.306	5.0E-20	6.98E-14	VWF	DSA	0.238	6.0E-14	9.01E-13	VWF	CG	0.365	1.4E-22	1.07E-29
CAV1	C4d	0.179	1.8E-11	4.08E-10	CAV1	DSA	0.161	3.4E-11	2.67E-09	CAV1	CG	0.202	1.1E-11	6.73E-10
DARC	C4d	0.177	3.5E-08	7.83E-07	DARC	DSA	0.140	1.3E-06	1.34E-06	DARC	CG	0.193	7.9E-08	6.57E-10
SOX7	C4d	0.130	1.3E-04	9.74E-04	IL1RL1	DSA	0.135	2.5E-04	4.47E-04	SOX7	CG	0.159	2.5E-05	6.78E-06
IL1RL1	C4d	0.103	1.1E-02	1.25E-02	ITGAX	DSA	0.114	6.4E-03	3.40E-02	IL1RL1	CG	0.150	8.0E-04	5.34E-05
										PECAM	CG	0.139	2.4E-05	1.08E-06
										ROBO4	CG	0.101	9.1E-05	2.60E-04
GENE	TERM	SE	Prob> t	FDRPV	GENE	TERM	SE	Prob> t	FDRPV	GENE	TERM	SE	Prob> t	FDRPV
VWF	PTC	0.189	1.7E-10	3.04E-09	VWF	G	0.240	3.1E-14	4.35E-14	IL1RL1	V	0.270	3.4E-11	2.63E-10
IL1RL1	PTC	0.162	9.1E-07	1.34E-04	DARC	G	0.135	3.6E-06	1.14E-05	GZMB	V	0.216	1.1E-05	1.24E-09
DARC	PTC	0.141	1.8E-07	6.72E-07	CAV1	G	0.121	8.2E-07	1.14E-05	CXCL11	V	0.184	3.5E-04	1.24E-05
GZMB	PTC	0.130	4.7E-04	2.33E-04	IL1RL1	G	0.100	5.7E-03	9.07E-03	CCL5	V	0.160	1.2E-04	6.54E-06
CAV1	PTC	0.125	3.2E-08	6.07E-08						CD3D	V	0.158	5.7E-04	7.44E-05
CCL5	PTC	0.121	1.2E-04	1.68E-03						ITGAX	V	0.151	2.2E-03	1.39E-04
FCGR3A	PTC	0.119	3.5E-04	2.12E-03						FCGR3A	V	0.149	6.4E-04	1.39E-04
CD68	PTC	0.119	4.0E-07	1.08E-05						CD68	V	0.146	9.6E-07	1.24E-09
ITGAX	PTC	0.113	2.1E-03	7.04E-03						GNLY	V	0.140	2.4E-04	3.28E-05
CD4	PTC	0.106	3.8E-05	1.68E-03						PDCD1	V	0.139	4.4E-03	9.91E-04
										ICOS	V	0.130	3.9E-03	6.00E-03
										IFNG	V	0.126	5.4E-03	5.12E-03
										CD8A	V	0.121	3.0E-03	9.66E-03
										CD4	V	0.115	5.0E-04	8.29E-04
										CD69	V	0.112	4.0E-03	6.66E-04

SUPPLEMENTARY TABLE 4

GENE	TERM	SE	Prob> t	FDRPV	GENE	TERM	SE	Prob> t	FDRPV	GENE	TERM	SE	Prob> t	FDRPV
PDCD1	I	0.302	8.4E-20	1.01E-21	PDCD1	T	0.287	2.4E-17	2.07E-17	PDCD1	TI	0.276	1.4E-15	1.22E-15
CXCL11	I	0.288	1.8E-15	2.43E-15	CD3D	T	0.285	5.8E-18	9.47E-17	CXCL11	TI	0.255	7.9E-12	3.13E-09
CD3D	I	0.268	1.5E-16	8.98E-19	CXCL11	T	0.276	1.3E-13	3.26E-12	CD3D	TI	0.253	8.1E-14	8.80E-13
ITGAX	I	0.244	1.8E-12	1.15E-13	ITGAX	T	0.266	8.6E-14	7.89E-12	GZMB	TI	0.243	4.1E-11	8.80E-13
IL1RL1	I	0.242	7.9E-15	9.85E-16	GZMB	T	0.249	6.7E-12	1.52E-11	IL1RL1	TI	0.235	1.3E-12	1.58E-14
GZMB	I	0.241	6.8E-12	1.28E-16	CCL5	T	0.225	3.3E-14	5.85E-12	ITGAX	TI	0.224	5.0E-10	4.73E-09
ICOS	I	0.238	2.4E-13	2.12E-13	ICOS	T	0.220	4.0E-11	4.55E-11	CCL5	TI	0.211	3.1E-12	2.98E-10
CCL5	I	0.236	1.1E-15	1.64E-16	MS4A1	T	0.209	3.4E-08	2.47E-07	CD8A	TI	0.197	6.8E-11	4.36E-10
CD8A	I	0.225	9.3E-15	8.28E-15	CD8A	T	0.209	1.4E-12	1.21E-10	ICOS	TI	0.193	1.4E-08	1.28E-08
MS4A1	I	0.210	2.6E-08	3.71E-08	TNFRSF18	T	0.198	3.2E-10	9.41E-11	MS4A1	TI	0.179	7.2E-06	4.36E-05
TNFRSF18	I	0.206	3.0E-11	3.64E-12	IL1RL1	T	0.193	1.9E-09	7.12E-09	CD68	TI	0.179	3.5E-15	5.91E-13
IFNG	I	0.200	4.7E-09	3.71E-08	PSMB10	T	0.188	4.8E-20	1.09E-20	TNFRSF18	TI	0.177	5.9E-08	2.61E-08
CD68	I	0.185	7.3E-18	6.85E-19	CD69	T	0.186	7.9E-11	4.62E-11	IFNG	TI	0.173	1.8E-06	1.27E-05
PSMB10	I	0.178	9.0E-19	1.40E-20	GNLY	T	0.170	8.6E-10	1.45E-07	GNLY	TI	0.169	4.9E-09	1.46E-06
FCGR3A	I	0.175	9.6E-08	5.00E-07	FCGR3A	T	0.161	1.3E-06	2.06E-05	FCGR3A	TI	0.163	2.0E-06	4.98E-05
GNLY	I	0.174	3.0E-10	6.20E-09	IFNG	T	0.157	6.5E-06	3.40E-05	PSMB10	TI	0.161	8.0E-15	9.19E-15
CD69	I	0.161	9.2E-09	1.86E-11	CD68	T	0.157	1.4E-12	6.83E-10	CD69	TI	0.161	5.1E-08	9.75E-09
CCR5	I	0.148	1.8E-09	1.22E-09	TBX21	T	0.139	2.8E-08	4.01E-07	TBX21	TI	0.132	3.4E-07	4.77E-06
TBX21	I	0.143	7.9E-09	2.12E-08	FOXP3	T	0.133	5.1E-06	3.11E-07	CD4	TI	0.128	8.8E-07	4.56E-06
CD4	I	0.131	1.2E-07	3.97E-08	TGFB1	T	0.132	3.1E-05	3.74E-05	CCR5	TI	0.125	1.6E-06	4.56E-06
CD74	I	0.125	6.9E-09	1.43E-09	CCR4	T	0.131	9.0E-06	2.67E-05	DARC	TI	0.122	2.5E-05	4.98E-05