

(A) AITL

<i>Pathway</i>	<i>Number of genes</i>	<i>P-value</i>	<i>FDR</i>	<i>Brief Description</i>	<i>Reference shown in Broad Institute' MSigDB</i>
NF- κ B target genes	106	0.05	0.15	Genes upregulated by NF-kappa B	Oncogene. 2003 Apr 3;22(13):1955-64
IL6 induced genes	145	0.05	0.16	Gene expression modulated on addition of interleukin-6.	Blood. 2004 Jan 1;103(1):242-51.
Immunosuppression related genes	64	0.03	0.17	Genes upregulated in peripheral blood lymphocytes treated with immunosuppressive drugs (sirolimus etc)	Am J Transplant. 2004 Sep;4(9):1475-89
TGF- β Signaling	49	0.02	0.24	Genes associated with TGF-beta pathway	Biocarta (www.biocarta.com)
VEGF regulated genes	30	0.05	0.17	Up-regulated genes after VEGF treatment	Angiogenesis. 2001;4(4):289-98
Genotoxic stress	40	0.02	0.14	Genes upregulated upon treatment with DNA damaging agents e.g. Cisplatin, Adriamycin	Oncogene. 2005 Jun 30;24(28):4572-9.
TP 53 signaling	93	0.03	0.17	Curated gene signature of p53 during genomic stress	Broad Institute http://www.broad.mit.edu/gsea/msigdb
<i>T-cell related</i>					
TCR signaling	44	0.04	0.16	T cell activation upon engagement of TCR	BioCarta
IL12 signaling	20	0.01	0.14	IL12 associated genes in T-cells	BioCarta
IL2 Signaling	22	0.04	0.19	IL-2 promotes proliferation via JAK and MAP kinase in T cells	BioCarta
T follicular helper cells (1)	46	0.02	0.14	Genes upregulated in human T _{FH} cells versus other CD4+ T-cell types (naïve, memory)	Blood. 2004 Oct 1;104(7):1952-60.
T follicular helper cells (2)	437	0.00	0.00	Genes associated with germinal center helper T-ells	J Immunol. 2004 Jul; 173(1):68-78.
T follicular helper cells (3)	129	0.05	0.08	Follicular helper T cells	Lymphoid gene signature data-base Immunol Rev. 2006; 210:67-85
Published AITL genes-signature	220	0.00	0.00	AITL upregulated genes	Blood 109:4952-63, 2007
Single positive CD4 T- cell	231	0.02	0.05	Genes upregulated in single positive thymic CD4 T cells compared to double positive T-cells	- Lymphoid gene signature data-base
Anergic T cells	30	0.05	0.09	T cell stimulated with ionomycin	- as above
<i>B cell related</i>					
IL4 signaling	66	0.00	0.13	Genes induced in peripheral B cells with the cytokine IL-4	Blood. 2005 Apr 1;105(7):2924-32.
BCR Signaling	45	0.00	0.11	Members of the BCR signaling pathway	Signaling Alliance (Signaling Alliance)
CD40 signaling in GCB- cells	97	0.00	0.08	CD40 regulated genes transformed GC B cells in vitro	Blood. 2004 Dec 15;104(13):
<i>Dendritic cell activation</i>					
Dendritic cell activation	50	0.01	0.14	Genes up-regulated in DC stimulated with IL-1 β /TNFa/LPS	Int Immunol. 2002 Oct;14(10):1203-13
Monocytes (CD14+) derived dendritic	106	0.01	0.15	Up-regulated mRNAs in monocyte-derived DCs cultured in GM-CSF/IL-4	J Biol Chem. 2001 May 25;276(21):17920-31.