

Module-Metabolite Correlations

T cell activation** (68.42%); Somatic diversification of immune receptors via germline recombination within a single locus; Negative regulation of cytotoxic cell degranulation *

T cell activation involved in immune response (61.95); Negative regulation of leucocyte activation; Myeloid dendritic cell differentiation

Regulation of B cell differentiation; Regulation of leucocyte mediated cytotoxicity; Negative regulation of leucocyte activation

Th1 cell cytokine production (47.92%); Pattern recognition receptor signaling pathway; Myeloid cell activation involved in immune response; Regulation of monocyte chemotaxis

CD8 positive alpha-beta cytotoxic T cell extravasation* (75%); Leucocyte mediated cytotoxicity* (25%)

Antigen processing and presentation of exogenous peptide antigen via MHC class II (100%)**

T cell differentiation involved in immune response; Nucleotide-binding oligomerization domain containing 1 signaling pathway; Regulation of myeloid leukocyte differentiation

B cell receptor signaling pathway (60%); Positive regulation of lymphocyte proliferation (40%)

Pattern recognition receptor signaling pathway (50%)*, Cellular response to type II interferon**; Response to type I interferon**

Immature T cell proliferation in thymus; Positive regulation of T cell receptor signaling pathway; Macrophage cytokine production; peptide antigen assembly with MHC class I protein complex

Neutrophil extravasation; Lymphocyte differentiation, Myeloid cell activation involved in immune response

T cell costimulation; Positive regulation of MDA-5 signaling pathway; Myeloid dendritic cell cytokine production

T cell costimulation (50%); activation of innate immune response; lymphocyte differentiation

Negative regulation of T cell receptor signaling pathway; Antigen processing and presentation exogenous lipid antigen via MHC class Ib; Regulation of immunoglobulin mediated immune response

Alpha-beta T cell differentiation** (50%); Negative regulation of immune response**;
Regulation of RIG-1 signaling pathway**

Positive regulation of mononuclear cell migration* (50%); Neutrophil chemotaxis* (50%)

Th cell differentiation* (60%); lymphocyte chemotaxis* (40%)

Regulation of pattern recognition receptor signaling pathway** (50%);
Antigen processing and presentation of peptide antigen** (50%)

