Jak3 Polyclonal Antibody Cy5.5 Conjugated

Catalog No: #C04334Cy5.5

Description

Product Name	Jak3 Polyclonal Antibody Cy5.5 Conjugated
Host Species	Rabbit
Clonality	Polyclonal
Isotype	IgG
Purification	Purified by Protein A.
Applications	IF(IHC-P)
Species Reactivity	Hu Ms Rt
Immunogen Description	KLH conjugated synthetic peptide aa 610-660 1124 derived from human Jak3
Conjugates	Cy5.5
Target Name	Jak3
Other Names	JAKL; LJAK; JAK-3; L-JAK; JAK3_HUMAN; Tyrosine-protein kinase JAK3; Janus kinase 3; Leukocyte janus kinase; JAK3
Accession No.	Swiss-Prot#:P52333NCBI Gene ID:3718
Cell Localization	Cytoplasm
Concentration	1mg ml
Formulation	Aqueous buffered solution containing 1% BSA, 50% glycerol and 0.09% sodium azide.
Storage	Store at 4C for 12 months.

Application Details

IF:1:50-200

Background

Non-receptor tyrosine kinase involved in various processes such as cell growth, development, or differentiation. Mediates essential signaling events in both innate and adaptive immunity and plays a crucial role in hematopoiesis during T-cells development. In the cytoplasm, plays a pivotal role in signal transduction via its association with type I receptors sharing the common subunit gamma such as IL2R, IL4R, IL7R, IL9R, IL15R and IL21R. Following ligand binding to cell surface receptors, phosphorylates specific tyrosine residues on the cytoplasmic tails of the receptor, creating docking sites for STATs proteins. Subsequently, phosphorylates the STATs proteins once they are recruited to the receptor. Phosphorylated STATs then form homodimer or heterodimers and translocate to the nucleus to activate gene transcription. For example, upon IL2R activation by IL2, JAK1 and JAK3 molecules bind to IL2R beta (IL2RB) and gamma chain (IL2RG) subunits inducing the tyrosine phosphorylation of both receptor subunits on their cytoplasmic domain. Then, STAT5A AND STAT5B are recruited, phosphorylated and activated by JAK1 and JAK3. Once activated, dimerized STAT5 translocates to the nucleus and promotes the transcription of specific target genes in a cytokine-specific fashion.

Note: This product is for in vitro research use only and is not intended for use in humans or animals.