

Jak3 Antibody HRP Conjugated

Catalog No: #C04334H

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Description

Product Name	Jak3 Antibody HRP Conjugated
Host Species	Rabbit
Clonality	Polyclonal
Isotype	IgG
Purification	Purified by Protein A.
Applications	WBB B IHC-PB IHC-F
Species Reactivity	HuB MsB RtB B
Immunogen Description	KLH conjugated synthetic peptide aa 610-660 1124 derived from human Jak3
Conjugates	HRP
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 ID3718
Uniprot	P52333
GeneID	3718;
Excitation Emission	N A
Cell Localization	Cytoplasm
Concentration	1mg ml
Formulation	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Application Details

WB=1:500-2000B B IHC-P=1:50-200B IHC-F=1:50-200B

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