JAK3 (Ab-785) Conjugated Antibody

Catalog No: #C33170

Package Size: #C33170-AF350 100ul #C33170-AF405 100ul #C33170-AF488 100ul #C33170-AF555 100ul #C33170-AF594 100ul #C33170-AF647 100ul #C33170-AF680 100ul #C33170-AF750 100ul #C33170-Biotin 100ul #C33170-Conjugated 50ul

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Description

Product Name	JAK3 (Ab-785) Conjugated Antibody
Host Species	Rabbit
Clonality	Polyclonal
Applications	WB, IF
Species Reactivity	Hu
Specificity	The antibody detects endogenous levels of total JAK3 protein.
Immunogen Description	Synthesized non-phosphopeptide derived from human JAK3 around the phosphorylation site of tyrosine 785 (S-D-Y(p)-E-L).
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Other Names	EC 2.7.10.2;JAK-3;JAK3;Janus kinase 3;L-JAK
Accession No.	Swiss-Prot#:P52333NCBI Gene ID:3718
Calculated MW	125
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at 4°C in dark for 6 months

Application Details

WB: 1:50-1:200

IF:1:50-1:200

Product Description

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

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.