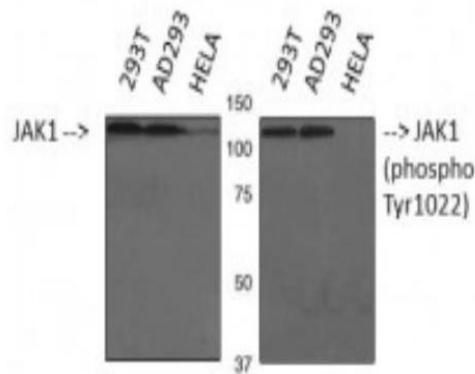


Phospho-JAK1 (Y1022) antibody

Cat# NB-22-0314 (100 ul)

Cat# NB-22-0314-S (20ul)



Western Blot (WB) analysis of 1. 293T 2.AD293 3.HELA using JAK1 (phosphoTyr1022) Polyclonal Antibody (NB-22-0314)

Description

JAK1 is a protein encoded by the JAK1 gene which is approximately 133,2 kDa. JAK1 is localised to the endomembrane system. It is involved in RET signalling, Th17 cell differentiation, influenza A and IL27 mediated signalling events. It is a membrane protein that is a member of a class of protein-tyrosine kinases characterized by the presence of a second phosphotransferase-related domain at the N-terminal to the PTK domain.

It plays a key role in interferon-alpha/beta and interferon-gamma signal transduction. JAK1 is expressed in the nervous system, liver, blood, spleen and lung. Mutations in the JAK1 gene may result in chilblain lupus and T- cell polymphocytic leukemia. NB-22-0314 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. This primary antibody specifically binds to endogenous JAK1 protein which only binds about Y1022 when Y1022 is phosphorylated.

Product Information

Code	NB-22-0314
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	IHC-p, ELISA, WB

Immunogen	Synthesized peptide derived from human JAK1 around the phosphorylation site of Y1022.
Immunogen Region	960-1040 aa
Gene ID	3716
Gene Symbol	JAK1
Dilution range	WB 1:500-1:2000 IHC 1:100-1:300 ELISA 1:10000
Specificity	Phospho-JAK1 (Y1022) Polyclonal Antibody detects endogenous levels of JAK1 protein only when phosphorylated at Y1022.
Tissue Specificity	Expressed at higher levels in primary colon tumors than in normal colon tissue. The expression level in metastatic colon tumors is comparable to the expression level in normal colon tissue.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Protein Name	Tyrosine-protein kinase JAK1 Janus kinase 1 JAK-1
Molecular Weight	132 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.

Target

Database Links	HGNC:6190 OMIM:147795
Alternative Names	JAK1 antibody JAK1A antibody JAK1B antibody Tyrosine-protein kinase JAK1 antibody Janus kinase 1 antibody JAK-1 antibody Phospho-JAK1 (Y1022) antibody
Function	Tyrosine kinase of the non-receptor type, involved in the IFN-alpha/beta/gamma signal pathway. Kinase partner for the interleukin (IL)-2 receptor.
Sequence and Domain Family	Possesses two phosphotransferase domains. The second one probably contains the catalytic domain, while the presence of slight differences suggest a different role for domain 1. The FERM domain mediates interaction with JAKMIP1.
Cellular Localization	Endomembrane system; Peripheral membrane protein. Note=Wholly intracellular, possibly membrane associated.
Post-translational Modifications	Autophosphorylated. Phosphorylated on tyrosine residues in response to interferon gamma signaling. Dephosphorylation of Tyr-1034 and Tyr-1035 by PTPN2 negatively regulates cytokine-mediated signaling. Ubiquitinated by RNF125; leading to its degradation by the proteasome.

For reference only

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