

Mouse JAK2 Monoclonal Antibody | anti-JAK2 antibody

JAK2 mouse Monoclonal Antibody (9B4)

CATALOG # AAA293850	HOST Mouse	REACTIVITY Human, Mouse, Rat	APPLICATIONS Immunohistochemistry
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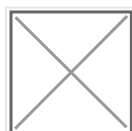
PRODUCT SYNONYMS

JAK2; Monoclonal Antibody; JAK2 mouse Monoclonal Antibody (9B4); Tyrosine-protein kinase JAK2 (EC 2.7.10.2)(Janus kinase 2)(JAK-2); anti-JAK2 antibody

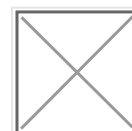
PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Clone Number	9B4
Applicable Applications for anti-JAK2 antibody	IHC (Immunohistochemistry)
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 2 weeks. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

IMAGES



Application Data
Dilution: IHC-p 1:50-300



IHC (Immunohistochemistry)
Dilution: IHC-p 1:50-300

ADDITIONAL INFORMATION

Related Product Information for anti-JAK2 antibody

Non-receptor tyrosine kinase involved in various processes such as cell growth, development, differentiation or histone modifications. Mediates essential signaling events in both innate and adaptive immunity. In the cytoplasm, plays a pivotal role in signal transduction via its association with type I receptors such as growth hormone (GHR), prolactin (PRLR), leptin (LEPR), erythropoietin (EPOR), thrombopoietin (THPO); or type II receptors including IFN-alpha, IFN-beta, IFN-gamma and multiple interleukins (PubMed:7615558). Following ligand-binding to cell surface receptors, phosphorylates specific tyrosine residues on the cytoplasmic tails of the receptor, creating docking sites for STATs proteins (PubMed:9618263). 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, cell stimulation with erythropoietin (EPO) during erythropoiesis leads to JAK2 autophosphorylation, activation, and its association with erythropoietin receptor (EPOR) that becomes phosphorylated in its cytoplasmic domain. Then, STAT5 (STAT5A or STAT5B) is recruited, phosphorylated and activated by JAK2. Once activated, dimerized STAT5 translocates into the nucleus and promotes the transcription of several essential genes involved in the modulation of erythropoiesis. Part of a signaling cascade that is activated by increased cellular retinol and that leads to the activation of STAT5 (STAT5A or STAT5B)(PubMed:21368206). In addition, JAK2 mediates angiotensin-2-induced ARHGEF1 phosphorylation (PubMed:20098430). Plays a role in cell cycle by phosphorylating CDKN1B (PubMed:21423214). Cooperates with TEC through reciprocal phosphorylation to mediate cytokine-driven activation of FOS transcription. In the nucleus, plays a key role in chromatin by specifically mediating phosphorylation of 'Tyr-41' of histone H3 (H3Y41ph), a specific tag that promotes exclusion of CBX5 (HP1 alpha) from chromatin (PubMed:19783980).

NCBI AND UNIPROT INFORMATION

NCBI GI #	4826776
NCBI GeneID	3717
NCBI Accession #	NP_004963.1
NCBI GenBank Nucleotide #	NM_004972.3
UniProt Accession #	O60674; O14636; O75297
Molecular Weight	130,674 Da
NCBI Official Full Name	tyrosine-protein kinase JAK2
NCBI Official Synonym Full Names	Janus kinase 2
NCBI Official Symbol	JAK2
NCBI Official Synonym Symbols	JTK10; THCYT3
NCBI Protein Information	tyrosine-protein kinase JAK2; JAK-2; Janus kinase 2 (a protein tyrosine kinase)
UniProt Protein Name	Tyrosine-protein kinase JAK2
UniProt Gene Name	JAK2
UniProt Synonym Gene Names	JAK-2
UniProt Entry Name	JAK2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/jak2-antibody-clone-9b4-immunohistochemistry-elisa/293850>