

Rabbit JAK2 Polyclonal Antibody | anti-JAK2 antibody

JAK2(Phospho-Tyr221) Antibody

CATALOG # AAA304732	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS Immunohistochemistry
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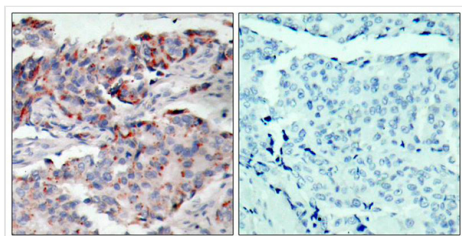
PRODUCT SYNONYMS

JAK2; Polyclonal Antibody; JAK2(Phospho-Tyr221) Antibody; JTK10; THCYT3; anti-JAK2 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Specificity	The antibody detects endogenous level of JAK2 only when phosphorylated at tyrosine 221.
Form/Format	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1.0 mg/ml (varies by lot)
Sequence Length	1132
Applicable Applications for anti-JAK2 antibody	IHC (Immunohistochemistry)
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of tyrosine 221(Q-D-Y(p)-H-I)derived from Human JAK2.
Modification	Phospho
Target Name	JAK2
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatogramphy using non-phosphopeptide
Preparation and Storage	Store at -20 degree C

IMAGES



IHC (Immunohistochemistry)

Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue, using JAK2 (phospho-Tyr221) antibody ().

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. 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, 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. In addition, JAK2 mediates angiotensin-2-induced ARHGEF1 phosphorylation. Plays a role in cell cycle by phosphorylating CDKN1B. 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.
Product Categories/Family for anti-JAK2 antibody	Phospho-specific Ab

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	Predicted MW: 125kd
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
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/polyclonal/jak2-antibody-immunohistochemistry-elisa/304732>