

JAK2 recombinant antibody

Phospho-JAK2 (Y1007 + Y1008) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA235567	Rabbit	Human	Immunoprecipitation, Immunohistochemistry, Western Blot, ELISA

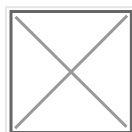
PRODUCT SYNONYMS

JAK2; Monoclonal Recombinant Antibody; Phospho-JAK2 (Y1007 + Y1008) Antibody; Tyrosine-protein kinase JAK2; Janus kinase 2; JAK-2; JAK2 recombinant antibody

PRODUCT SPECIFICATIONS

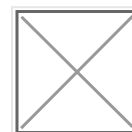
Host	Rabbit
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG
Purity/Purification	Affinity-Chromatography
Form/Format	Liquid; In phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Sequence Length	1132
Applicable Applications for JAK2 recombinant antibody	IP (Immunoprecipitation), IHC (Immunohistochemistry), WB (Western Blot), ELISA
Immunogen Species	Human
Immunogen	A synthesized peptide derived from human Phospho-JAK2 (Y1007 + Y1008)
Conjugate	Non-Conjugated
Species	Homo sapiens (Human)
Research Area	Cell Biology
Gene Names	JAK2
Preparation and Storage	Upon receipt, store at -20 degree C or -80 degree C. Avoid repeated freeze.

IMAGES



IP (Immunoprecipitation)

Immunoprecipitating Phospho-JAK2 in Hela whole cell lysate treated with PervanadateLane 1: Rabbit control IgG (1ug) instead of AAA235567 in Hela whole cell lysate treated with Pervanadate. For western blotting, a HRP-conjugated Protein G antibody was used as the secondary antibody (1/2000)Lane 2: AAA235567 (3ug)+ Hela whole cell lysate treated with Pervanadate(1mg)Lane 3: Hela whole cell lysate treated with Pervanadate(20ug)



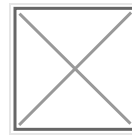
IHC (Immunohistochemistry)

IHC image of AAA235567 diluted at 1:100 and staining in paraffin-embedded human cervical cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30 min at RT. Then primary antibody (1% BSA) was incubated at 4 degree C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



IHC (Immunohistochemistry)

IHC image of AAA235567 diluted at 1:100 and staining in paraffin-embedded human ovarian cancer performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4 degree C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



WB (Western Blot)

Western BlotPositive WB detected in Hela whole cell lysate, A549 whole cell lysate (treated with Pervanadate or not)All lanes Phospho-JAK2 antibody at 0.75ug/mlSecondaryGoat polyclonal to rabbit IgG at 1/50000 dilutionPredicted band size: 120 KDaObserved band size: 120 KDa

ADDITIONAL INFORMATION

Related Product Information for JAK2 recombinant 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).

Product Categories/Family for JAK2 recombinant antibody

[Recombinant Antibody](#); [Cell Biology](#)

NCBI AND UNIPROT INFORMATION

NCBI GI #	1015809690
NCBI GeneID	3717
NCBI Accession #	NP_001309123.1
NCBI GenBank Nucleotide #	NM_001322194.1
UniProt Accession #	O60674 ; O14636 ; O75297
NCBI Official Full Name	tyrosine-protein kinase JAK2 isoform a
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

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-recombinant-antibody-immunoprecipitation-immunohistochemistry-western-blot-elisa/235567>