

P-JAK2 (Y1007 + Y1008) Rabbit mAb [rOdy]

Cat NO. :A84126

Information:

Applications	Reactivity:	UniProt ID:	MW(kDa)	Host	Isotype	Size
WB IHC ICC IP FC	Human,Mouse,R	O60674	130kDa	Rabbit	IgG	50ul,100ul,200ul
	at					

Applications detail:

Application

WB

1:1000-2000

IHC

1:100

The optimal dilutions should be determined by the end user

Conjugate:

UnConjugate

Form:

Liquid

sensitivity:

Endogenous

Purification:

Affinity-chromatography

Specificity:

Antibody is produced by immunizing animals with A synthesized peptide derived from human Phospho-JAK2 (Y1007 + Y1008)

Storage buffer and conditions:

Antibody store in 10 mM PBS, 0.5mg/ml BSA, 50% glycerol (buffer) .

Shipped at 4°C. Store at-20°C or -80°C.

Products are valid for one natural year of receipt. Avoid repeated freeze / thaw cycles.

Tissue specificity:

Ubiquitously expressed throughout most tissues..

Subcellular location:

Endomembrane system, Peripheral membrane protein. Cytoplasm. Nucleus.

Function:

Introduction: WB: Western Blot IP: Immunoprecipitation IHC: Immunohistochemistry ChIP: Chromatin Immunoprecipitation ICC/IF: Immunocytochemistry/
Immunofluorescence F: Flow Cytometry

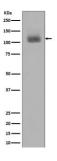
Cross Reactivity: H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus MI: mink C: chicken Dm D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Hr: horse



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)..

Validation Data:

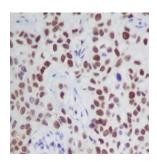
P-JAK2 (Y1007 + Y1008) Rabbit mAb [rOdy] Images



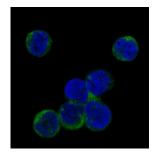
Western blot (SDS PAGE) analysis of extracts from Jurkat cell lysates treated with Pervanadate.Using P-JAK2 (Y1007 + Y1008) Rabbit mAb [rOdy]at dilution of 1:1000 incubated at 4°C over night.

View more information on http://naturebios.com





Immunohistochemical analysis of paraffin-embedded human cervix cancer, .Using P-JAK2 (Y1007 + Y1008) Rabbit mAb [rOdy] at dilution of 1:100 incubated at 4 $^{\circ}\mathrm{C}$ over night.Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunofluorescent analysis of Jurkat cells treated with Pervanadate, Using P-JAK2 (Y1007 + Y1008) Rabbit mAb [rOdy] at dilution of 1:100 incubated at 4° C over night.