Product Data Sheet

Phospho-JAK2 (Tyr1007/1008) Antibody

Cat. No.: HY-P80829

Synonyms: Phospho-JAK2 (Tyr1007/1008) Antibody is a non-conjugated and Rabbit origined polyclonal

> antibody about 131 kDa, targeting to Phospho-JAK2 (Tyr1007/1008). It can be used for WB,IHC-P,ICC/IF,IP,FC assays with tag free, in the background of Human, Mouse, Rat.

Host: Rabbit

Reactivity: Human, Mouse, Rat Conjugation: Non-conjugated

SwissProt ID: 060674 Research Field: Cell Biology

Predicted band size: 131 kDa Molecular Weight:

PROPERTIES		
Formulation	Supplied in phosphate buffered saline (pH 7.4), 150 mM NaCl and 50% glycerol. Preservative: 0.02% sodium azide	
Purity	affinity purified	
Storage & Stability	Stored at -20°C for 1 year. Avoid repeated freeze / thaw cycles.	
Appearance	Liquid	
Application & Dilution Ratio	Application	Dilution Ratio
	WB	1:500-1:1,000
	IHC	1:50-1:100
	IF	1:50-1:200
	IP	1:20
	FC	1:50-1:100
Shipping	Shipping with blue ice.	

DESCRIPTION

Background

JAK2: This gene encodes a non-receptor tyrosine kinase that plays a central role in cytokine and growth factor signalling. The primary isoform of this protein has an N-terminal FERM domain that is required for erythropoietin receptor association, an SH2 domain that binds STAT transcription factors, a pseudokinase domain and a C-terminal tyrosine kinase domain. Cytokine binding induces autophosphorylation and activation of this kinase. This kinase then recruits and phosphorylates signal transducer and activator of transcription (STAT) proteins. Growth factors like TGF-beta 1 also induce phosphorylation and activation of this kinase and translocation of downstream STAT proteins to the nucleus where they influence gene transcription. Mutations in this gene are associated with numerous inflammatory diseases and malignancies. This gene is a downstream target of the pleiotropic cytokine IL6 that is produced by B cells, T cells, dendritic cells and macrophages to

produce an immune response or inflammation. Disregulation of the IL6/JAK2/STAT3 signalling pathways produces increased cellular proliferation and myeloproliferative neoplasms of hematopoietic stem cells. A nonsynonymous mutation in the pseudokinase domain of this gene disrupts the domains inhibitory effect and results in constitutive tyrosine phosphorylation activity and hypersensitivity to cytokine signalling. This gene and the IL6/JAK2/STAT3 signalling pathway is a therapeutic target for the treatment of excessive inflammatory responses to viral infections. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Jul 2020]

Caution: Product has not been fully validated for medical applications. For research use only.

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