

JAK2 (phospho Tyr221) Polyclonal Antibody

Catalog No: YP0574

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: JAK2

Fields: >>EGFR tyrosine kinase inhibitor resistance;>>Chemokine signaling

pathway;>>PI3K-Akt signaling pathway;>>Necroptosis;>>Signaling pathways regulating pluripotency of stem cells;>>JAK-STAT signaling pathway;>>Th1 and

Th2 cell differentiation;>>Th17 cell differentiation;>>Cholinergic synapse;>>Prolactin signaling pathway;>>Adipocytokine signaling

pathway;>>AGE-RAGE signaling pathway in diabetic complications;>>Growth

hormone synthesis, secretion and

action;>>Leishmaniasis;>>Toxoplasmosis;>>Tuberculosis;>>Hepatitis

B;>>Influenza A;>>Kaposi sarcoma-associated herpesvirus infection;>>Herpes simplex virus 1 infection;>>Pathways in cancer;>>Chemical carcinogenesis - receptor activation;>>PD-L1 expression and PD-1 checkpoint pathway in

cancer;>>Lipid and atherosclerosis

Gene Name: JAK2

Protein Name : Tyrosine-protein kinase JAK2

O60674

Q62120

Human Gene Id: 3717

Human Swiss Prot

No:

Mouse Gene ld: 16452

Mouse Swiss Prot

No:

Rat Gene ld: 24514

Rat Swiss Prot No: Q62689

Immunogen: The antiserum was produced against synthesized peptide derived from human

JAK2 around the phosphorylation site of Tyr221. AA range:191-240



Specificity: Phospho-JAK2 (Y221) Polyclonal Antibody detects endogenous levels of JAK2

protein only when phosphorylated at Y221.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 130kD

Cell Pathway: Chemokine; Jak_STAT; Adipocytokine;

Background: This gene product is a protein tyrosine kinase involved in a specific subset of

cytokine receptor signaling pathways. It has been found to be constituitively associated with the prolactin receptor and is required for responses to gamma interferon. Mice that do not express an active protein for this gene exhibit embryonic lethality associated with the absence of definitive erythropoiesis.

[provided by RefSeq, Jul 2008],

Function : catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine

phosphate., disease: Chromosomal aberrations involving JAK2 are found in both chronic and acute forms of eosinophilic, lymphoblastic and myeloid leukemia. Translocation t(8;9)(p22;p24) with PCM1 links the protein kinase domain of JAK2

to the major portion of PCM1. Translocation t(9;12)(p24;p13) with

ETV6., disease: Defects in JAK2 are a cause of acute myelogenous leukemia (AML) [MIM:601626]. AML is a malignant disease in which hematopoietic precursors are arrested in an early stage of development., disease: Defects in JAK2 are a cause of susceptibility to Budd-Chiari syndrome [MIM:600880]. Budd-

Chiari syndrome is a spectrum of disease states, including anatomic

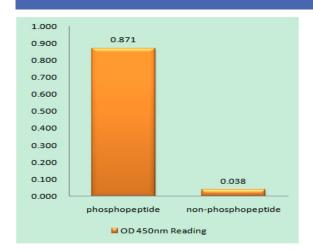
abnormalities and hypercoagulable disorders, resulting in hepatic venous outflow

occlusion. Clinical manifestations observed in the majority of patients incl

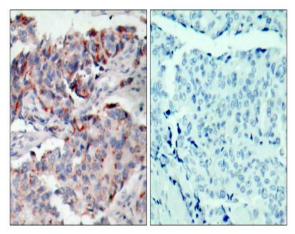
Subcellular Location : Endomembrane system; Peripheral membrane protein. Cytoplasm. Nucleus.

Expression: Ubiquitously expressed throughout most tissues.

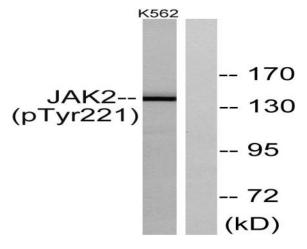
Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using JAK2 (Phospho-Tyr221) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using JAK2 (Phospho-Tyr221) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from K562 cells, using JAK2 (Phospho-Tyr221) Antibody. The lane on the right is blocked with the phospho peptide.