

JAK3 (Phospho Tyr981) rabbit pAb

Catalog No: YP1590

Reactivity: Human; Mouse; Rat

Applications: WB;IHC

Target: JAK3

Fields: >>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;>>Hepatitis B;>>Measles;>>Human T-cell leukemia virus 1 infection;>>Epstein-Barr virus infection;>>Pathways in cancer;>>Viral

carcinogenesis;>>Non-small cell lung cancer;>>Primary immunodeficiency

Gene Name: JAK3

Protein Name: JAK3 (Phospho Tyr981)

P52333

Q62137

Human Gene Id: 3718

Human Swiss Prot

No:

Mouse Gene ld: 16453

Mouse Swiss Prot

No:

Rat Swiss Prot No: Q63272

Immunogen : Synthesized peptide derived from human JAK3 (Phospho Tyr981)

Specificity: This antibody detects endogenous levels of Human, Mouse, Rat JAK3 (Phospho

Tyr981)

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

Source: Polyclonal, Rabbit, IgG

1/3



Dilution: WB 1:500-2000;IHC 1:50-300

Purification: The antibody was affinity-purified from rabbit serum by affinity-chromatography

using specific immunogen.

Concentration: 1 mg/ml

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

Observed Band: 73kD

Background:

catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate., disease: Defects in JAK3 are a cause of severe combined immunodeficiency autosomal recessive T-cell-negative/B-cell-positive/NK-cellnegative (T(-)B(+)NK(-)SCID) [MIM:600802]. SCID refers to a genetically and clinically heterogeneous group of rare congenital disorders characterized by impairment of both humoral and cell-mediated immunity, leukopenia, and low or absent antibody levels. Patients with SCID present in infancy with recurrent. persistent infections by opportunistic organisms. The common characteristic of all types of SCID is absence of T-cell-mediated cellular immunity due to a defect in Tcell development..domain:Possesses two phosphotransferase domains. The second one probably contains the catalytic domain (By similarity), while the presence of slight differences suggest a different role for domain 1., function: Tyrosine kinase of the non-receptor type, involved in the interleukin-2 and interleukin-4 signaling pathway. Phosphorylates STAT6, IRS1, IRS2 and PI3K., online information: JAK3 mutation db, PTM: Tyrosine phosphorylated in response to IL-2 and IL-4., similarity: Belongs to the protein kinase superfamily. Tyr protein kinase family. JAK subfamily, similarity: Contains 1 FERM domain., similarity: Contains 1 protein kinase domain., similarity: Contains 1 SH2 domain., subcellular location: Wholly intracellular, possibly membrane associated., subunit: Interacts with STAM2 and MYO18A (By similarity). Interacts with SHB., tissue specificity: In NK cells and an NK-like cell line but not in resting Tcells or in other tissues. The S-form is more commonly seen in hematopoietic lines, whereas the B- and M-forms are detected in cells both of hematopoietic and epithelial origins.,

Function:

regulation of transcription, DNA-dependent, regulation of transcription from RNA polymerase II promoter, protein amino acid phosphorylation, phosphorus metabolic process, phosphate metabolic process, cell surface receptor linked signal transduction, enzyme linked receptor protein signaling pathway, intracellular signaling cascade, protein kinase cascade, positive regulation of biosynthetic process, positive regulation of macromolecule biosynthetic process, positive regulation of macromolecule metabolic process, positive regulation of gene expression, phosphorylation, peptidyl-tyrosine phosphorylation, peptidyl-tyrosine modification, cytokine-mediated signaling pathway, positive regulation of cellular biosynthetic process, regulation of transcription, positive regulation of transcription, DNA-dependent, positive regulation of nucleobase, nucleoside, nucleotide and nucleic acid metabolic pro



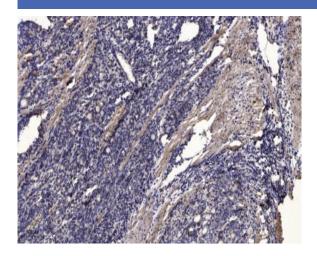
Subcellular Location :

Endomembrane system; Peripheral membrane protein. Cytoplasm.

Expression:

In NK cells and an NK-like cell line but not in resting T-cells or in other tissues. The S-form is more commonly seen in hematopoietic lines, whereas the B-form is detected in cells both of hematopoietic and epithelial origins.

Products Images



Immunohistochemical analysis of paraffin-embedded human Gastric adenocarcinoma. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).