

JAK3 Polyclonal Antibody

Catalog No :	YT2430
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC;IF;ELISA
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 :	Tyrosine-protein kinase JAK3
Human Gene Id :	3718
Human Swiss Prot No :	P52333
Mouse Gene Id :	16453
Mouse Swiss Prot No :	Q62137
Rat Swiss Prot No :	Q63272
Immunogen :	The antiserum was produced against synthesized peptide derived from human JAK3. AA range:751-800
Specificity :	JAK3 Polyclonal Antibody detects endogenous levels of JAK3 protein.
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. IF 1:200 - 1:1000. ELISA: 1:20000. Not yet tested in other applications.

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 : 125kD

Cell Pathway : Chemokine;Jak_STAT;Primary immunodeficiency;

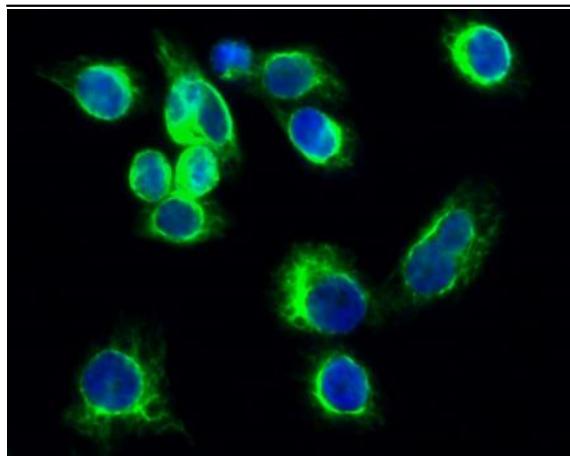
Background : The protein encoded by this gene is a member of the Janus kinase (JAK) family of tyrosine kinases involved in cytokine receptor-mediated intracellular signal transduction. It is predominantly expressed in immune cells and transduces a signal in response to its activation via tyrosine phosphorylation by interleukin receptors. Mutations in this gene are associated with autosomal SCID (severe combined immunodeficiency disease). [provided by RefSeq, Jul 2008],

Function : 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-cell-negative (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 T-cell 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

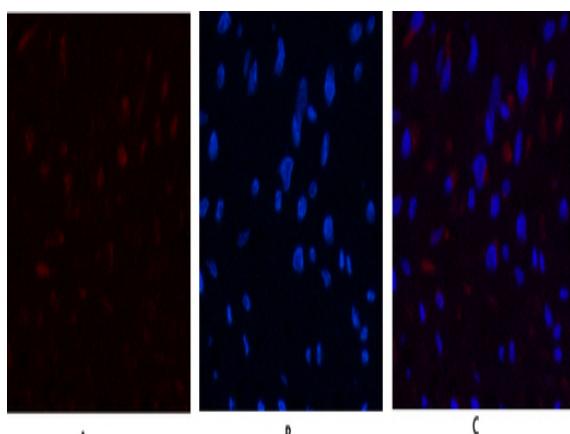
Subcellular Location : Endomembrane system ; Peripheral membrane protein . Cytoplasm .

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.

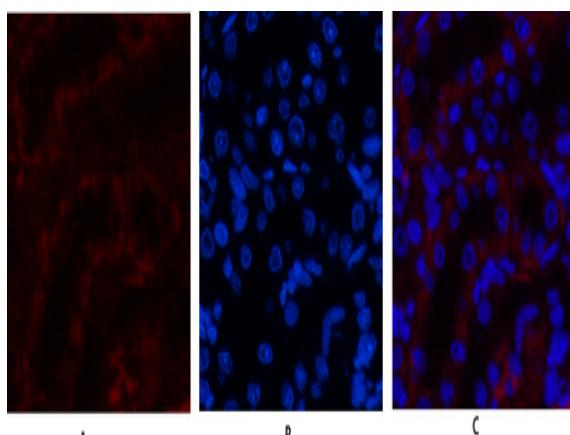
Products Images



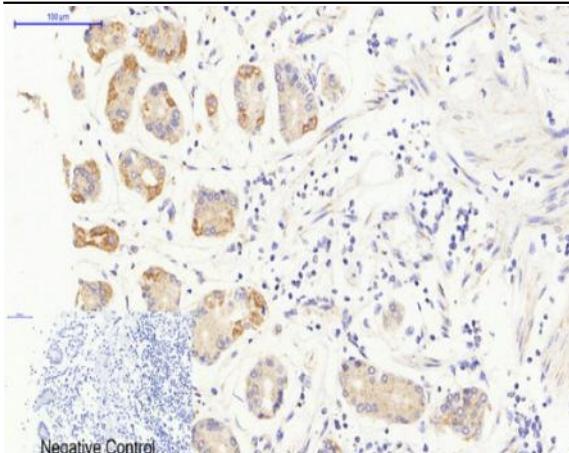
Immunofluorescence analysis of HeLa cell. 1,JAK3 Polyclonal Antibody(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog:RS3211 was diluted at 1:1000(room temperature, 50min). 3 DAPI(blue) 10min.



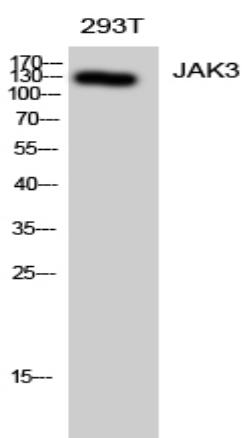
Immunofluorescence analysis of human-uterus tissue. 1,JAK3 Polyclonal Antibody(red) was diluted at 1:200(4° overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



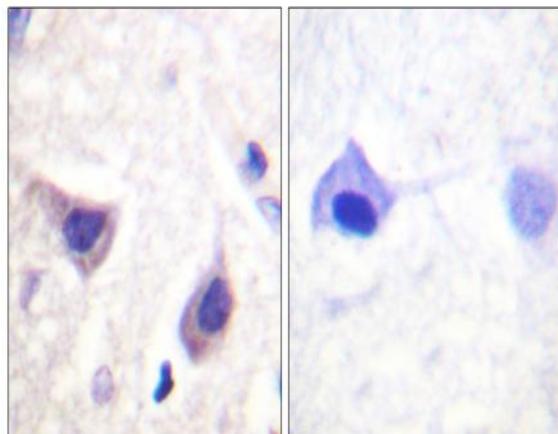
Immunofluorescence analysis of rat-kidney tissue. 1,JAK3 Polyclonal Antibody(red) was diluted at 1:200(4° overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



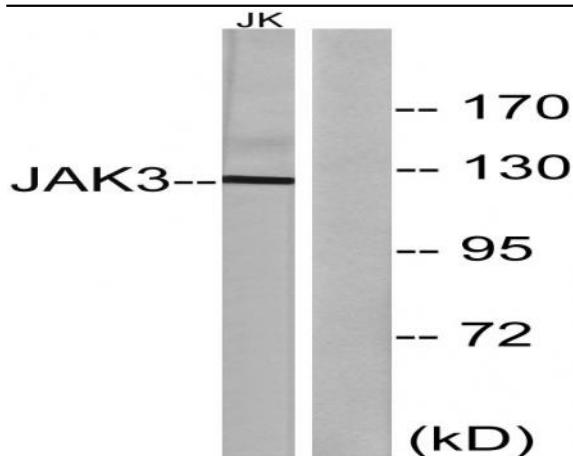
Immunohistochemical analysis of paraffin-embedded Human-stomach tissue. 1, JAK3 Polyclonal Antibody was diluted at 1:200(4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98 °C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



Western Blot analysis of 293T cells using JAK3 Polyclonal Antibody diluted at 1:1000



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using JAK3 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from Jurkat cells, using JAK3 Antibody. The lane on the right is blocked with the synthesized peptide.