**Applications** 

WB,IHC,IF,ELISA



# JAK3 Rabbit pAb

CatalogNo: YT2430

### **Key Features**

Host Species Reactivity

Rabbit
 Human, Mouse, Rat

MW Isotype
• 125kD (Observed) IgG

### **Recommended Dilution Ratios**

WB 1:500-1:2000 IHC 1:100-1:300 IF 1:200-1:1000 ELISA 1:20000

Not yet tested in other applications.

#### Storage

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

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

## **Basic Information**

**Clonality** Polyclonal

## Immunogen Information

**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.

### | Target Information

Gene name

JAK3

**Protein Name** 

Tyrosine-protein kinase JAK3

Organism	Gene ID	UniProt ID
Human	<u>3718;</u>	<u>P52333;</u>
Mouse	<u>16453;</u>	<u>Q62137;</u>
Rat		<u>Q63272;</u>

Cellular Localization

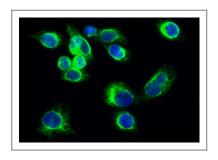
Endomembrane system; Peripheral membrane protein. Cytoplasm.

Tissue specificity 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.

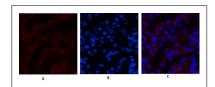
**Function** 

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 for domain 1., Function: Tyrosine kinase of the nonreceptor 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 T-cells or in other tissues. The S-form is more commonly seen in hematopoietic lines, whereas the B- and Mforms are detected in cells both of hematopoietic and epithelial origins.,

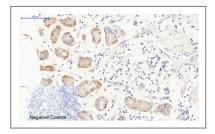
### **I** Validation Data



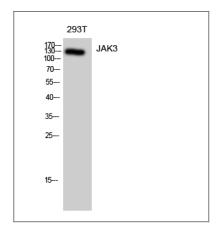
Immunofluorescence analysis of Hela cell. 1,JAK3 Polyclonal Antibody(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog:RS3211 was diluted at 1:1000(room temperature, 50min). 3 DAPI(blue) 10min.



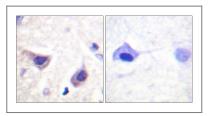
Immunofluorescence analysis of rat-kidney tissue. 1,JAK3 Polyclonal Antibody(red) was diluted at 1:200(4° overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



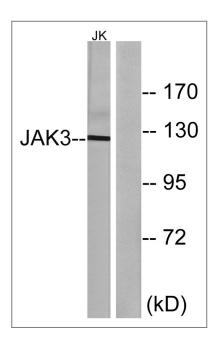
Immunohistochemical analysis of paraffin-embedded Human-stomach tissue. 1,JAK3 Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used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

#### | Contact information

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Please scan the QR code to access additional product information:

JAK3 Rabbit pAb

For Research Use Only. Not for Use in Diagnostic Procedures.

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