

## Product datasheet for **AP20252PU-N**

### JAK3 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	<b>Western blot:</b> 1/500-1/1000. <b>Immunohistochemistry on paraffin sections:</b> 1/50-1/200. <b>Immunofluorescence:</b> 1/50-1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	This antibody detects endogenous levels of JAK3 protein.
Formulation:	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.2 State: Aff - Purified State: Liquid purified Ig fraction
Concentration:	1.0 mg/ml
Purification:	Affinity-chromatography using epitope-specific immunogen; purity is > 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20 °C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 125 kDa
Gene Name:	Janus kinase 3
Database Link:	<a href="#">Entrez Gene 16453 Mouse</a> <a href="#">Entrez Gene 25326 Rat</a> <a href="#">Entrez Gene 3718 Human</a> <a href="#">P52333</a>



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**Background:**

Jak3 (Janus Kinase 3) belongs to the family of non-receptor Janus tyrosine kinases, which regulate a spectrum of cellular functions downstream of activated cytokine receptors in the lympho-hematopoietic system. Immunological stimuli, such as interferons and cytokines, induce recruitment of Stat transcription factors to cytokine receptor-associated JAK3. JAK3 then phosphorylates proximal Stat factors, which subsequently dimerize, translocate to the nucleus and bind to cis elements upstream of target gene promoters to regulate transcription. The canonical JAK/Stat pathway is integral to maintaining a normal immune system, stimulating proliferation, differentiation, survival and host resistance to pathogens. Altering JAK/Stat signaling to reduce cytokine induced pro-inflammatory responses represents an attractive target for anti-inflammatory therapies.

**Synonyms:**

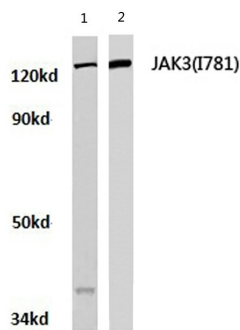
Janus kinase 3, JAK-3, L-JAK

**Protein Families:**

Druggable Genome, Protein Kinase

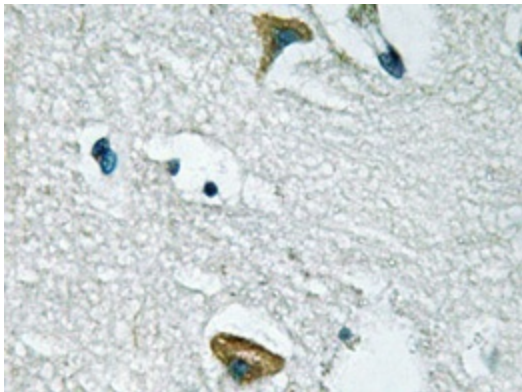
**Protein Pathways:**

Chemokine signaling pathway, Jak-STAT signaling pathway, Primary immunodeficiency

**Product images:**

Lane 1: HeLa whole cell lysate  
Lane 2: Raw264.7 whole cell lysate  
JAK3 (I781) pAb at 1:500 dilution

Western blot (WB) analysis of JAK3 antibody (Cat.-No.: AP20252PU-N) in extracts from HeLa and Raw264.7 cells.



Immunohistochemistry analysis of JAK3 antibody (AP20252PU-N) in paraffin-embedded human brain tissue.