

**#3775** Store at -20°C

# Jak3 Antibody



100 µl  
 (10 Western mini-blot)

**Orders** ■ 877-616-CELL (2355)  
 orders@cellsignal.com  
**Support** ■ 877-678-TECH (8324)  
 info@cellsignal.com  
**Web** ■ www.cellsignal.com

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This product is for *in vitro* research use only and is not intended for use in humans or animals.  
 This product is not intended for use as a therapeutic or in diagnostic procedures.

**Entrez-Gene ID # 3718**  
**Swiss-Prot Acc. # P52333**

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Endogenous	H	115 kDa	Rabbit**

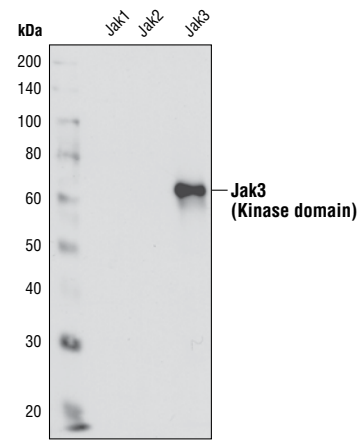
**Background:** Members of the Janus family of tyrosine kinases (Jak1, Jak2, Jak3 and Tyk2) are activated by ligands binding to a number of associated cytokine receptors (1). Upon cytokine receptor activation, Jak proteins become autophosphorylated and phosphorylate their associated receptors to provide multiple binding sites for signaling proteins. These associated signaling proteins typically contain SH2 or other phospho-tyrosine-binding domains, including Stats (2), Shc (3), insulin receptor substrates (4) and focal adhesion kinase (FAK) (5).

**Specificity/Sensitivity:** Jak3 Antibody detects endogenous levels of total Jak3 protein. No cross-reactivity was detected with other family members at physiological conditions.

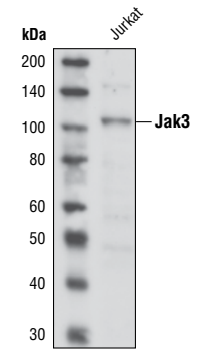
**Source/Purification:** Polyclonal antibodies are prepared by immunizing animals with a synthetic peptide (KLH-coupled) corresponding to residues at the carboxy-terminus of Jak3. Antibodies are purified by protein A and peptide affinity chromatography.

**Background References:**

- (1) Leonard, W.J. and O'Shea, J.J. (1998) *Annu. Rev. Immunol.* 16, 293–322.
- (2) Darnell, J.E. (1997) *Science* 277, 1630–1635.
- (3) VanderKuur, J. et al. (1995) *J. Biol. Chem.* 270, 7587–7593.
- (4) Argetsinger, L.S. et al. (1995) *J. Biol. Chem.* 270, 14685–14692.
- (5) Zhu, T. et al. (1998) *J. Biol. Chem.* 273, 10682–10689.



Western blot analysis of recombinant proteins containing the kinase domain of Jak1, Jak2 and Jak3 (5 ng each), using Jak3 Antibody.



Western blot analysis of extracts from Jurkat cells, using Jak3 Antibody.

**Storage:** Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

**\*Species cross-reactivity is determined by Western blot.**  
**\*\*Anti-rabbit secondary antibodies must be used to detect this antibody.**

**Recommended Antibody Dilutions:**  
 Western blotting 1:1000

**For application specific protocols please see the web page for this product at [www.cellsignal.com](http://www.cellsignal.com).**

- Companion Products:**
- Jak1 Antibody #3332
  - Phospho-Jak1 (Tyr1022/1023) Antibody #3331
  - Jak2 Kinase #7751
  - Phospho-Jak2 (Tyr1007/1008) Antibody #3771
  - Jak2 (24B11) Rabbit mAb #3229
  - Phototope®-HRP Western Blot Detection System, Anti-rabbit IgG, HRP-linked Antibody #7071
  - Anti-rabbit IgG, HRP-linked Antibody #7074
  - Biotinylated Protein Ladder Detection Pack #7727
  - 20X LumiGLO® Reagent and 20X Peroxide #7003

**Please visit [www.cellsignal.com](http://www.cellsignal.com) for a complete listing of recommended companion products.**

**IMPORTANT: For Western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.**

**Applications Key:** W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide  
**Species Cross-Reactivity Key:** H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebra fish B—bovine  
 Dg—dog Pg—pig Sc—S. cerevisiae All—all species expected Species enclosed in parentheses are predicted to react based on 100% sequence homology.