

#3776 Store at -20°C

# Phospho-Jak2 (Tyr1007/1008) (C80C3) Rabbit mAb



- Small 100 µl (10 western blots)
- Petite 40 µl (4 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Entrez-Gene ID # 3717  
Swiss-Prot Acc. # O60674

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W Endogenous	H, M, (R, Mk, B)	125 kDa	Rabbit IgG**

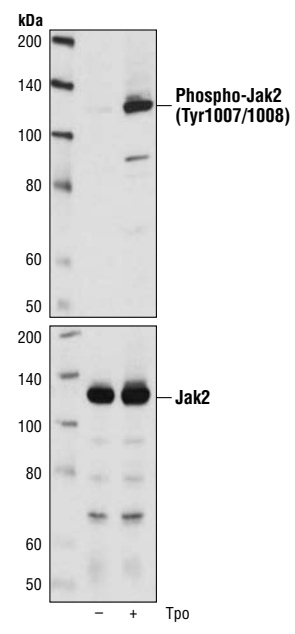
**Background:** Members of the Janus family of tyrosine kinases (Jak1, Jak2, Jak3 and Tyk2) are activated by ligands binding to a number of associated cytokine receptors (1). Upon cytokine receptor activation, Jak proteins become autophosphorylated and phosphorylate their associated receptors to provide 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:** Phospho-Jak2 (Tyr1007/1008) (C80C3) Rabbit mAb detects endogenous levels of Jak2 when phosphorylated at Tyr1007/1008. This antibody can also detect single phosphorylation at either 1007 or 1008. Cross-reactivity may be observed with phosphorylated Tyk2.

**Source/Purification:** Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide corresponding to a region surrounding Tyr1007/1008 of human Jak2.

**Background References:**

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



Western blot analysis of extracts from BaF3 cells overexpressing murine Jak2 and thrombopoietin (Tpo) receptor, untreated or Tpo-treated, using Phospho-Jak2 (Tyr1007/1008) (C80C3) Rabbit mAb (top) or total Jak2 (24B11) Rabbit mAb #3229 (bottom). Cell line was kindly provided by Dr. Stefan Constantinescu, Ludwig Institute for Cancer Research, Brussels, Belgium.

**Storage:** Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. 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).

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.**

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**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—zebrafish B—bovine  
 Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.