Phospho-Jak2 (Tyr1007/1008) Antibody

For Research Use Only. Not For Use In Diagnostic Procedures.

**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, such as Stats (2), Shc (3), insulin receptor substrates (4) and focal adhesion kinase (FAK) (5), typically contain SH2 or other phospho-tyrosine-binding domains.

The tyrosine residues 1007/1008 of Jak2 in the putative activation loop are the homologous tyrosine residues 1054/1055 in Tyk2, which are important in the regulation of Tyk2 kinase activity (6).

**Specificity/Sensitivity:** Phospho-Jak2 (Tyr1007/1008) Antibody detects endogenous levels of Jak2 only when phosphorylated at Tyr1007/1008. This antibody may cross-react with phospho-Jak1 and phospho-Tyk2.

**Source/Purification:** Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Tyr1007/1008 of human Jak2 protein. Antibodies are purified by protein A and peptide affinity chromatography.

**Background References:**

**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.

**Recommended Antibody Dilutions:**
Western Blotting 1:1000
Immunoprecipitation 1:50

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

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

**Applications Species Cross-Reactivity** | Molecular Wt. | Source | Applications Key |
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W, IP | Endogenous | 125 kDa | Rabbit** |

**Applications Key:** W—Western  
IP—Immunoprecipitation  
HC—Immunohistochemistry  
CIP—Chromatin Immunoprecipitation  
IF—Immunofluorescence  
F—Flow cytometry  
E-P—ELISA-Peptide

**Species Cross-Reactivity Key:**  
H—human  
M—mouse  
R—rat  
Hm—hamster  
Mm—monkey  
Mm—mink  
C—chicken  
Dm—D. melanogaster  
X—Xenopus  
Z—zebrafish  
B—bovine  
Dg—dog  
Pg—pig  
Sc—S. cerevisiae  
Cc—C. elegans  
Hr—horse  
All—all species expected  
Species enclosed in parentheses are predicted to react based on 100% homology.

**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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