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#4406

## Phospho-Jak2 (Tyr1007) (D15E2) Rabbit mAb

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

<b>Applications:</b> W	<b>Reactivity:</b> H M	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 125	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #O60674	<b>Entrez-Gene Id:</b> 3717
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### Product Usage Information

#### Application

Western Blotting

#### Dilution

1:1000

### 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.

### Specificity/Sensitivity

Phospho-Jak2 (Tyr1007) (D15E2) Rabbit mAb detects endogenous levels of Jak2 when phosphorylated at Tyr1007. This antibody can also detect double phosphorylation at Tyr1007 and Tyr1008. Cross-reactivity may be observed with phosphorylated Jak3 and Tyk2.

### Species predicted to react based on 100% sequence homology

Rat, Monkey, Bovine

### Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Tyr1007 of human Jak2.

### 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.

### 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, 1630-5.
3. VanderKuur, J. et al. (1995) *J Biol Chem* 270, 7587-93.
4. Argetsinger, L.S. et al. (1995) *J Biol Chem* 270, 14685-92.
5. Zhu, T. et al. (1998) *J Biol Chem* 273, 10682-9.

### Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

### Western Blot Buffer

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

### Applications Key

**W:** Western Blotting

### Cross-Reactivity Key

**H:** Human **M:** Mouse

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