

## Anti-phospho-JAK2 (Tyr1007)

Rabbit Polyclonal Antibody

**Catalog # J02-65BR**

Lot # Z2014-41

### Cited Applications

IHC

*Ideal working dilutions for each application should be empirically determined by the investigator.*

### Specificity

Recognizes the JAK2 protein phosphorylated at tyrosine 1007

### Cross Reactivity

Human, Mouse and Rat

### Host/Isotype/Clone#

Rabbit, IgG

### Immunogen

The antiserum was produced against synthesized phosphopeptide derived from human JAK2 around the phosphorylation site of tyrosine 1007 (K-E-YP-Y-K).

### Formulation

Phosphate buffered saline (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

### Stability

1yr at -20°C from date of shipment

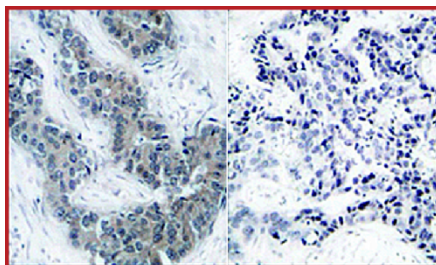
### Scientific Background

JAK2 is a member of intracellular non-receptor tyrosine kinases that transduce cytokine-mediated signals via the JAK-STAT pathway (1). JAK2 has two near-identical phosphate-transferring domains. One domain exhibits the kinase activity while the other stabilizes the JAK conformational structure. JAK2 is the predominant JAK kinase activated in response to several growth factors and cytokines such as IL-3, GM-CSF and erythropoietin. JAK2 has been found to be constitutively associated with the prolactin receptor and is required for responses to gamma interferon (2).

### References

1. Lacronique, V. Et al: A TEL-JAK2 fusion protein with constitutive kinase activity in human leukemia. *Science*, 1997; 278: 1309-1312.
2. Ho, J.M. et al: TEL-JAK2 constitutively activates the extracellular signal-regulated kinase (ERK), stress-activated protein/Jun kinase (SAPK/JNK), and p38 signaling pathways. *Blood*, 2002; 100: 1438-1448.
3. James C, et al. (2005) *Nature*. 434(7037): 1144-1148. Argetsinger LS, et al. (2004) *Mol Cell Biol*. 24(11): 4955-4967.
4. Ungureanu D, et al. (2002) *Mol Cell Biol*. 22(10): 3316-3326. Xie S, et al. (2001) *Oncogene*. 20(43): 6188-6195.

### Sample Data



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using Anti-phospho-JAK2 (Tyr1007).

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Rabbit Polyclonal Antibody

Catalog#	J02-65BR
Lot #	Z2014-41
Purification	Affinity chromatography
Stability	1yr at -20°C from date of shipment
Storage & Shipping	Store product at -20°C. For optimal storage, aliquot antibody into smaller quantities after centrifugation and store at recommended temperature. For optimal performance, avoid repeated handling and multiple freeze/thaw cycles. Product shipped on ice packs.

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