

#1013 Store at -20°C

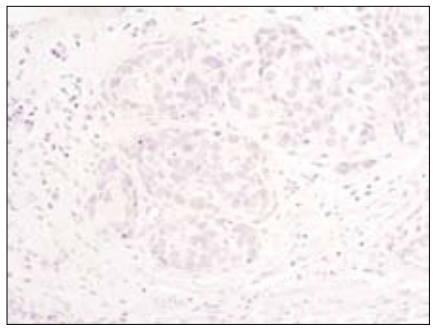
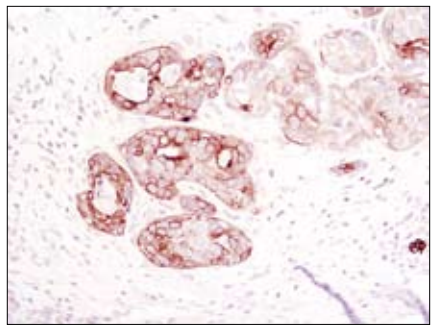
# Jak1 Blocking Peptide

✓ 100 µg

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New 03/07

This product is for *in vitro* research use only and is not intended for use in humans or animals.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma using Jak1 (6G4) Rabbit mAb #3344 in the presence of control peptide (left) or Jak1 Blocking Peptide (right).

**Description:** This peptide is used to block Jak1 (6G4) Rabbit mAb #3344 reactivity.

**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).

**Quality Control:** The quality of the peptide was evaluated by reversed-phase HPLC and by mass spectrometry. The peptide blocks Jak1 (6G4) Rabbit mAb #3344 by immunohistochemistry.

**Directions for Use:** For immunohistochemistry, add twice the volume of peptide as volume of antibody used in 100 µl total volume. Incubate for a minimum of 30 minutes prior to adding the entire volume to the slide. Recommended antibody dilutions can be found on the product data sheet.

**Applications:** Use as a blocking reagent to evaluate the specificity of antibody reactivity in immunohistochemistry protocols.

**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.

**Storage:** Supplied in 20 mM potassium phosphate (pH 7.0), 50 mM NaCl, 0.1 mM EDTA, 1 mg/ml BSA and 5% glycerol. Store at -20°C.

**Companion Products:**  
Jak1 (6G4) Rabbit mAb #3344