

#1645 Store at -20°C

Phospho-Met (Tyr1234/1235) Blocking Peptide

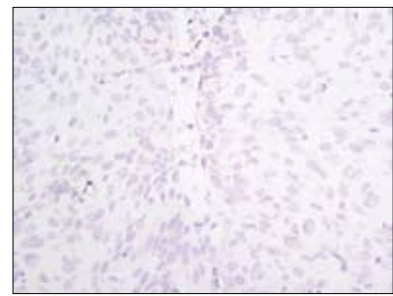
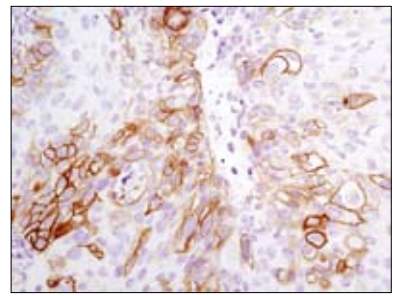
✓ 100 µg



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New 11/08

This product is for *in vitro* research use only and is not intended for use in humans or animals. This product is not intended for use as a therapeutic or in diagnostic procedures.



Immunohistochemical analysis of paraffin-embedded HCC827 xenograft using Phospho-Met (Tyr1234/1235) (D26) Rabbit mAb #3077 in the presence of control peptide (left) or Phospho-Met (Tyr1234/1235) Blocking Peptide (right).

Description: This peptide is used to block Phospho-Met (Tyr1234/1235) (D26) Rabbit mAb #3077 reactivity in western and immunohistochemistry protocols.

Background: Met, a high affinity tyrosine kinase receptor for hepatocyte growth factor (HGF, also known as scatter factor) is a disulfide-linked heterodimer made of 45 kDa α - and 145 kDa β -subunits (1,2). The α -subunit and the amino-terminal region of the β -subunit form the extracellular domain. The remainder of the β -chain spans the plasma membrane and contains a cytoplasmic region with tyrosine kinase activity. Interaction of Met with HGF results in autophosphorylation at multiple tyrosines, which recruit several downstream signaling components, including Gab1, c-Cbl and PI3 kinase (3). These fundamental events are important for all of the biological functions involving Met kinase activity. The addition of a phosphate at cytoplasmic Tyr1003 is essential for Met protein ubiquitination and degradation (4). Phosphorylation of Tyr1234/1235 in the Met kinase domain is critical to kinase activation. Phosphorylation of Tyr1349 in the Met cytoplasmic domain provides a direct binding site for Gab1 (5). Altered Met levels and/or tyrosine kinase activities are found in several types of tumors, including renal, colon and breast. Thus, Met is an attractive cancer therapeutic and diagnostic target (6).

Quality Control: The quality of the peptide was evaluated by reversed-phase HPLC and by mass spectrometry. The peptide blocks Phospho-Met (Tyr1234/1235) (D26) Rabbit mAb #3077 signal in western blotting and immunohistochemistry.

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

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 relevant product data sheet.

Background References:

- (1) Weidner, K.M. et al. (1993) *J. Cell Biol.* 121, 145–154.
- (2) Park, M. et al. (1986) *Cell* 45, 895–904.
- (3) Bardelli, A. et al. (1997) *Oncogene* 15, 3103–3111.
- (4) Taher, T.E. et al. (2002) *J. Immunol.* 169, 3793–3800.
- (5) Schaeper, U. et al. (2000) *J. Cell Biol.* 149, 1419–1432.
- (6) Traxler, P. et al. (2001) *Med. Res. Rev.* 21, 499–512.

Entrez-Gene ID #4233
Swiss-Prot Acc. #P08581

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:

Phospho-Met (Tyr1234/1235) (D26) Rabbit mAb #3077
SignalStain® Antibody Diluent #8112

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