#1023 Store at -20°C

Phospho-IKK-α/β (Ser176/180) Blocking Peptide

☑100 µg

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rev. 06/12/17

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Description: This peptide is used to block Phospho-IKK-a/b (Ser176/180) (16A6) Rabbit mAb reactivity.

Background: The NF-κB/Rel transcription factors are present in the cytosol in an inactive state, complexed with the inhibitory IκB proteins (1-3). Most agents that activate NF-κB do so through a common pathway based on phosphorylation-induced, proteasome-mediated degradation of IκB (3-7). The key regulatory step in this pathway involves activation of a high molecular weight IκB kinase (IKK) complex whose catalysis is generally carried out by three tightly associated IKK subunits. IKKα and IKKβ serve as the catalytic subunits of the kinase and IKKγ serves as the regulatory subunit (8,9). Activation of IKK depends upon phosphorylation at Ser177 and Ser181 in the activation loop of IKKβ (Ser176 and Ser180 in IKKα), which causes conformational changes, resulting in kinase activation (10-13).

Quality Control: The quality of the peptide was evaluated by reverse-phase HPLC and by mass spectrometry. The peptide blocks Phospho-IKK-alpha/beta (Ser176/180) (16A6) Rabbit mAb signal in peptide dot blot.

Directions for Use: Use as a blocking reagent to evaluate the specificity of antibody reactivity in peptide dot blot protocols. Recommended antibody dilutions can be found on the relevant product data sheet.

Background References:

(1) Baeuerle, P.A. et al. (1988) *Science* 242, 540–546.
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(3) Finco, T.S. et al. (1994) *Proc. Natl. Acad. Sci. USA* 91, 11884–11888.
(4) Brown, K. et al. (1995) *Science* 267, 1485–1488.
(5) Brockman, J.A. et al. (1995) *Mol. Cell. Biol.* 15, 2809–2818.
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(7) Chen, Z.J. et al. (1996) *Cell* 84, 853–862.
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(10) DiDonato, J.A. et al. (1997) *Nature* 388, 548–554.
(11) Mercurio, F. et al. (1997) *Science* 278, 860–866.
(12) Johnson, L.N. et al. (1996) *Cell* 85, 149–158.
(13) Delhase, M. et al. (1999) *Science* 284, 309–313.

Entrez-Gene ID #1147, 3551
UniProt ID #O15111, O14920

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

Companion Products:

Phospho-IKKα/β (Ser176/180) (16A6) Rabbit mAb #2697