

Phospho-NF- κ B p105 (Ser933) Blocking Peptide

✓ 100 μ g



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Description: This peptide is used to block Phospho-NF- κ B p105 (Ser933) (18E6) Rabbit mAb #4806 reactivity.

Background: Transcription factors of the nuclear factor κ B (NF- κ B)/Rel family play a pivotal role in inflammatory and immune responses (1,2). There are five family members in mammals: RelA, c-Rel, RelB, NF- κ B1 (p105/p50), and NF- κ B2 (p100/p52). Both p105 and p100 are proteolytically processed by the proteasome to produce p50 and p52, respectively. Rel proteins bind p50 and p52 to form dimeric complexes that bind DNA and regulate transcription. In unstimulated cells, NF- κ B is sequestered in the cytoplasm by I κ B inhibitory proteins (3-5). NF- κ B-activating agents can induce the phosphorylation of I κ B proteins, targeting them for rapid degradation through the ubiquitin-proteasome pathway and releasing NF- κ B to enter the nucleus where it regulates gene expression (6-8). NIK and IKK α (IKK1) regulate the phosphorylation and processing of NF- κ B2 (p100) to produce p52, which translocates to the nucleus (9-11).

Quality Control: The quality of the peptide was evaluated by reversed-phase HPLC and by mass spectrometry. The peptide detects Phospho-NF- κ B p105 (Ser933) (18E6) Rabbit mAb #4806 reactivity by peptide dot blot.

Directions for Use: Use as a blocking reagent to evaluate the specificity of antibody reactivity by peptide dot blot protocols.

Background References:

- (1) Baeuerle, P.A. and Henkel, T. (1994) *Annu. Rev. Immunol.* 12, 141-179.
- (2) Baeuerle, P.A. and Baltimore, D. (1996) *Cell* 87, 13-20.
- (3) Haskill, S. et al. (1991) *Cell* 65, 1281-1289.
- (4) Thompson, J.E. et al. (1995) *Cell* 80, 573-582.
- (5) Whiteside, S.T. et al. (1997) *EMBO J.* 16, 1413-1426.
- (6) Traenckner, E.B. et al. (1995) *EMBO J.* 14, 2876-2883.
- (7) Scherer, D.C. et al. (1995) *Proc. Natl. Acad. Sci. USA* 92, 11259-11263.
- (8) Chen, Z.J. et al. (1996) *Cell* 84, 853-862.
- (9) Senftleben, U. et al. (2001) *Science* 293, 1495-1499.
- (10) Coope, H.J. et al. (2002) *EMBO J.* 21, 5375-5385.
- (11) Xiao, G. et al. (2001) *Mol. Cell* 7, 401-409.

Entrez-Gene ID #4790

UniProt ID #P19838

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-NF- κ B p105 (Ser933) (18E6) Rabbit mAb #4806.