## Phospho-S6 Ribosomal Protein (Ser235/236) Blocking Peptide

100 μg (100 Sections)



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## For Research Use Only. Not For Use In Diagnostic Procedures.

**Description:** This peptide is used to block Phospho-S6 Ribosomal Protein (Ser235/236) Antibody #2211 reactivity.

**Background:** One way that growth factors and mitogens effectively promote sustained cell growth and proliferation is by upregulating mRNA translation (1,2). Growth factors and mitogens induce the activation of p70 S6 kinase and the subsequent phosphorylation of the S6 ribosomal protein. Phosphorylation of S6 ribosomal protein correlates with an increase in translation of mRNA transcripts that contain an oligopyrimidine tract in their 5' untranslated regions (2). These particular mRNA transcripts (5'TOP) encode proteins involved in cell cycle progression, as well as ribosomal proteins and elongation factors necessary for translation (2,3). Important S6 ribosomal protein phosphorylation sites include several residues (Ser235, Ser236, Ser240, and Ser244) located within a small, carboxy-terminal region of the S6 protein (4,5).

Quality Control: The quality of the peptide was evaluated by reversed-phase HPLC and by mass spectrometry The peptide detects Phospho-S6 Ribosomal Protein (Ser235/236) Antibody #2211 in peptoid dot blot.

**Directions for Use:** Use as a blocking reagent to evaluate the specificity of antibody reactivity in peptoid dot blot protocols.

## **Background References:**

- (1) Dufner, A. and Thomas, G. (1999) *Exp. Cell Res.* 253, 100–109.
- (2) Peterson, R.T. and Schreiber, S.L. (1998) *Curr. Biol.* 8, R248–R250.
- (3) Jefferies, H.B. et al. (1997) EMBO J. 16, 3693-3704.
- (4) Ferrari, S. et al. (1991) *J. Biol. Chem.* 266, 22770–22775.
- (5) Flotow, H. and Thomas, G. (1992) *J. Biol. Chem.* 267, 3074–3078

## Entrez Gene ID #6194 UniProt ID #P62753

**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.

For product specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

 Applications Key:
 W—Western
 IP—Immunoprecipitation
 IHC—Immunohistochemistry
 ChIP—Chromatin Immunoprecipitation
 IF—Immunofluorescence
 F—Flow cytometry
 E-P—ELISA-Peptide

 Species Cross-Reactivity Key:
 H—human
 M—mouse
 R—rat
 Hm—hamster
 Mk—monkey
 Mi—mink
 C—chicken
 Dm—D. melanogaster
 X—xenopus
 Z—zebrafish
 B—bovine

 Dg—dog
 Pg—pig
 Sc—S. cerevisiae
 Ce—C. elegans
 Hr—horse
 All—all species expected
 Species enclosed in parentheses are predicted to react based on 100% homology.