

PPM1A Antibody Blocking Peptide
Synthetic peptide
Catalog # BP14313a

Specification

PPM1A Antibody Blocking Peptide - Product Information

Primary Accession [P35813](#)

PPM1A Antibody Blocking Peptide - Additional Information

Gene ID 5494

Other Names

Protein phosphatase 1A, Protein phosphatase 2C isoform alpha, PP2C-alpha, Protein phosphatase 1A, PPM1A, PPPM1A

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PPM1A Antibody Blocking Peptide - Protein Information

Name PPM1A

Synonyms PPPM1A

Function

Enzyme with a broad specificity. Negatively regulates TGF- beta signaling through dephosphorylating SMAD2 and SMAD3, resulting in their dissociation from SMAD4, nuclear export of the SMADs and termination of the TGF-beta-mediated signaling. Dephosphorylates PRKAA1 and PRKAA2. Plays an important role in the termination of TNF-alpha- mediated NF-kappa-B activation through dephosphorylating and inactivating IKBKB/IKKB.

Cellular Location

Nucleus. Cytoplasm, cytosol. Membrane; Lipid- anchor Note=Weakly associates at the membrane and N-myristoylation mediates the membrane localization. {ECO:0000250|UniProtKB:P49443}

PPM1A Antibody Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

PPM1A Antibody Blocking Peptide - Images

PPM1A Antibody Blocking Peptide - Background

The protein encoded by this gene is a member of the PP2C family of Ser/Thr protein phosphatases. PP2C family members are known to be negative regulators of cell stress response pathways. This phosphatase dephosphorylates, and negatively regulates the activities of, MAP kinases and MAP kinase kinases. It has been shown to inhibit the activation of p38 and JNK kinase cascades induced by environmental stresses. This phosphatase can also dephosphorylate cyclin-dependent kinases, and thus may be involved in cell cycle control. Overexpression of this phosphatase is reported to activate the expression of the tumor suppressor gene TP53/p53, which leads to G2/M cell cycle arrest and apoptosis. Three alternatively spliced transcript variants encoding distinct isoforms have been described.

PPM1A Antibody Blocking Peptide - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) ;Zhang, B., et al. Histochem. Cell Biol. 132(2):169-179(2009)Sun, W., et al. Cell. Signal. 21(1):95-102(2009)Wang, Y., et al. J. Biol. Chem. 283(48):33578-33584(2008)Bu, S., et al. J. Biol. Chem. 283(28):19593-19602(2008)