

PPP5C Antibody (S460) Blocking peptide
Synthetic peptide
Catalog # BP11664a**Specification**

PPP5C Antibody (S460) Blocking peptide - Product InformationPrimary Accession [P53041](#)**PPP5C Antibody (S460) Blocking peptide - Additional Information****Gene ID** 5536**Other Names**

Serine/threonine-protein phosphatase 5, PP5, Protein phosphatase T, PP-T, PPT, PPP5C, PPP5

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.

PPP5C Antibody (S460) Blocking peptide - Protein Information**Name** PPP5C**Synonyms** PPP5**Function**

Serine/threonine-protein phosphatase that dephosphorylates a myriad of proteins involved in different signaling pathways including the kinases CSNK1E, ASK1/MAP3K5, PRKDC and RAF1, the nuclear receptors NR3C1, PPARG, ESR1 and ESR2, SMAD proteins and TAU/MAPT (PubMed:14734805, PubMed:14764652, PubMed:14871926, PubMed:15383005, PubMed:15546861, PubMed:16260606, PubMed:16790549, PubMed:16892053, PubMed:19176521, PubMed:19948726, PubMed:21144835, PubMed:22399290, PubMed:22781750, PubMed:23102700, PubMed:9000529, PubMed:30699359). Implicated in wide ranging cellular processes, including apoptosis, differentiation, DNA damage response, cell survival, regulation of ion channels or circadian rhythms, in response to steroid and thyroid hormones, calcium, fatty acids, TGF-beta as well as oxidative and genotoxic stresses (PubMed:14734805, PubMed:14764652, PubMed:14871926, PubMed:15383005, PubMed:15546861, PubMed:16260606, PubMed:16790549, PubMed:16892053, PubMed:19176521, PubMed:19948726, PubMed:21144835, PubMed:22399290, PubMed:22781750, PubMed:23102700, PubMed:9000529, PubMed:30699359). Participates in the control of DNA damage response mechanisms such as checkpoint activation and DNA damage repair through, for instance, the regulation ATM/ATR-signaling and dephosphorylation of PRKDC and TP53BP1 (PubMed:14871926, PubMed:16260606, PubMed:21144835). Inhibits ASK1/MAP3K5-mediated apoptosis induced by oxidative stress (PubMed:23102700). Plays a positive role in adipogenesis, mainly through the dephosphorylation and activation of PPARG transactivation function (By similarity). Also dephosphorylates and inhibits the anti- adipogenic effect of NR3C1 (By similarity). Regulates the circadian rhythms, through the dephosphorylation and activation of CSNK1E (PubMed:16790549). May modulate TGF-beta signaling pathway by the regulation of SMAD3 phosphorylation and protein expression levels (PubMed:22781750). Dephosphorylates and may play a role in the regulation of TAU/MAPT (PubMed:15546861). Through their dephosphorylation, may play a role in the regulation of ions channels such as KCNH2 (By similarity). Dephosphorylate FNIP1, disrupting interaction with HSP90AA1/Hsp90 (PubMed:30699359).

Cellular Location

Nucleus. Cytoplasm. Cell membrane. Note=Predominantly nuclear (PubMed:15383005). But also present in the cytoplasm (PubMed:15383005) Translocates from the cytoplasm to the plasma membrane in a RAC1- dependent manner (PubMed:19948726).

Tissue Location

Ubiquitous..

PPP5C Antibody (S460) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

PPP5C Antibody (S460) Blocking peptide - Images**PPP5C Antibody (S460) Blocking peptide - Background**

Dietary fat absorption from the small intestine is facilitated by acyl-CoA:monoacylglycerol transferase (MOGAT; EC2.3.1.22) and acyl-CoA:diacylglycerol acyltransferase (DGAT; see MIM 604900) activities. MOGAT catalyzes the joining of monoacylglycerol and fatty acyl-CoAs to form diacylglycerol (Yen and Farese, 2003 [PubMed 12621063]).

PPP5C Antibody (S460) Blocking peptide - References

Cao, J., et al. J. Biol. Chem. 279(18):18878-18886(2004) Lockwood, J.F., et al. Am. J. Physiol. Endocrinol. Metab. 285 (5), E927-E937 (2003) :Yen, C.L., et al. J. Biol. Chem. 278(20):18532-18537(2003) Cao, J., et al. J. Biol. Chem. 278(16):13860-13866(2003) Winter, A., et al. Cytogenet. Genome Res. 102 (1-4), 42-47 (2003) :