

PTOR1 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP4875b

Specification

PTOR1 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

P85299

PTOR1 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 55615

Other Names

Proline-rich protein 5, Protein observed with Rictor-1, Protor-1, PRR5, PROTOR1

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.

PTOR1 Antibody (C-term) Blocking Peptide - Protein Information

Name PRR5

Synonyms PROTOR1

Function

Subunit of mTORC2, which regulates cell growth and survival in response to hormonal signals. mTORC2 is activated by growth factors, but, in contrast to mTORC1, seems to be nutrient-insensitive. mTORC2 seems to function upstream of Rho GTPases to regulate the actin cytoskeleton, probably by activating one or more Rho-type guanine nucleotide exchange factors. mTORC2 promotes the serum-induced formation of stress-fibers or F-actin. mTORC2 plays a critical role in AKT1 'Ser-473' phosphorylation, which may facilitate the phosphorylation of the activation loop of AKT1 on 'Thr-308' by PDK1 which is a prerequisite for full activation. mTORC2 regulates the phosphorylation of SGK1 at 'Ser-422'. mTORC2 also modulates the phosphorylation of PRKCA on 'Ser-657'. PRR5 plays an important role in regulation of PDGFRB expression and in modulation of platelet-derived growth factor signaling. May act as a tumor suppressor in breast cancer.

Tissue Location

Most abundant in kidney and liver. Also highly expressed in brain, spleen, testis and placenta. Overexpressed in several colorectal tumors.



PTOR1 Antibody (C-term) Blocking Peptide - Protocols

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

• Blocking Peptides

PTOR1 Antibody (C-term) Blocking Peptide - Images

PTOR1 Antibody (C-term) Blocking Peptide - Background

PTOR1 encodes a protein with a proline-rich domain. This protein is located in a region of chromosome 22 reported to contain a tumor suppressor gene that may be involved in breast and colorectal tumorigenesis. Rare read-through transcripts, containing exons from the ARHGAP8 gene which is located immediately downstream, led to the original description of PRR5 and ARHGAP8 as a single gene.

PTOR1 Antibody (C-term) Blocking Peptide - References

Woo, S.Y., et al. J. Biol. Chem. 282(35):25604-25612(2007)Pearce, L.R., et al. Biochem. J. 405(3):513-522(2007)Johnstone, C.N., et al. Genomics 85(3):338-351(2005)