

Sin1 Blocking Peptide
Catalog # PBV10475b**Specification**

Sin1 Blocking Peptide - Product Information

Primary Accession	Q8BKH7
Other Accession	NP_796319
Gene ID	227743
Calculated MW	59009

Sin1 Blocking Peptide - Additional Information**Gene ID** 227743**Application & Usage**

The peptide is used for blocking the antibody activity of Sin1. It usually blocks the antibody activity completely in Western blot analysis by incubating the peptide with equal volume of antibody for 30-60 minutes at 37°C.

Other Names

Target of rapamycin complex 2 subunit MAPKAP1, TORC2 subunit MAPKAP1, Mitogen-activated protein kinase 2-associated protein 1, Stress-activated map kinase-interacting protein 1, SAPK-interacting protein 1, Mapkap1, Mip1, Sin1

Target/Specificity

Sin1

Formulation

50 µg (0.5 mg/ml) in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA and 0.02% thimerosal.

Reconstitution & Storage

-20 °C

Background Descriptions**Precautions**

Sin1 Blocking Peptide is for research use only and not for use in diagnostic or therapeutic procedures.

Sin1 Blocking Peptide - Protein Information**Name** Mapkap1**Synonyms** Mip1, Sin1

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'. Within mTORC2, MAPKAP1 is required for complex formation and mTORC2 kinase activity. MAPKAP1 inhibits MAP3K2 by preventing its dimerization and autophosphorylation. Inhibits HRAS and KRAS signaling. Enhances osmotic stress-induced phosphorylation of ATF2 and ATF2-mediated transcription. Isoform 1 is involved in ciliogenesis, regulates cilia length through its interaction with CCDC28B independently of mTORC2 complex.

Cellular Location

Cell membrane; Peripheral membrane protein. Cytoplasmic vesicle. Nucleus

Tissue Location

Ubiquitously expressed, with highest levels in testis, kidney and liver. Present in renal tubule cells (at protein level).

Sin1 Blocking Peptide - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Sin1 Blocking Peptide - Images