

MAPKAP1 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP8641b**Specification**

MAPKAP1 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [Q9BPZ7](#)**MAPKAP1 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 79109**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, mSIN1, MAPKAP1, MIP1, SIN1

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP8641b](/products/AP8641b) was selected from the C-term region of human MAPKAP1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

MAPKAP1 Antibody (C-term) 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. 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 heart and skeletal muscle.

MAPKAP1 Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

MAPKAP1 Antibody (C-term) Blocking Peptide - Images**MAPKAP1 Antibody (C-term) Blocking Peptide - Background**

MAPKAP1 is highly similar to the yeast SIN1 protein, a stress-activated protein kinase.

MAPKAP1 Antibody (C-term) Blocking Peptide - References

Jin,J., et.al., Curr. Biol. 14 (16), 1436-1450 (2004) Sarbassov,D.D., et.al., Science 307 (5712), 1098-1101 (2005)