

# MAPKAP1 / MIP1 Antibody (Internal)

Rabbit Polyclonal Antibody Catalog # ALS11696

# **Specification**

## MAPKAP1 / MIP1 Antibody (Internal) - Product Information

Application IHC
Primary Accession O9BPZ7

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 59kDa KDa

# MAPKAP1 / MIP1 Antibody (Internal) - 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**

18 amino acid peptide from near the center of human MAPKAP1.

# **Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

#### **Precautions**

MAPKAP1 / MIP1 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

#### MAPKAP1 / MIP1 Antibody (Internal) - 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





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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**

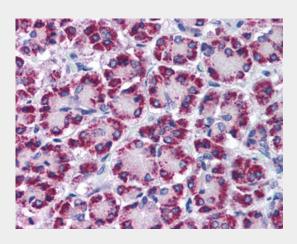
Ubiquitously expressed, with highest levels in heart and skeletal muscle.

# MAPKAP1 / MIP1 Antibody (Internal) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# MAPKAP1 / MIP1 Antibody (Internal) - Images



Anti-SIN1 antibody IHC of human pancreas.

# MAPKAP1 / MIP1 Antibody (Internal) - Background

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# MAPKAP1 / MIP1 Antibody (Internal) - References

Schroder W., et al. Gene 339:17-23(2004). Cheng J., et al. Mol. Cell. Biol. 25:5955-5964(2005). Ota T., et al. Nat. Genet. 36:40-45(2004). Bechtel S., et al.BMC Genomics 8:399-399(2007). Humphray S.J., et al. Nature 429:369-374(2004).