

## **Product datasheet for TP508361**

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## Mapkap1 (NM\_177345) Mouse Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Purified recombinant protein of Mouse mitogen-activated protein kinase associated protein 1

(Mapkap1), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug

Species: Mouse

**Expression Host:** HEK293T

Expression cDNA Clone

>MR208361 representing NM\_177345

or AA Sequence: Red=Cloning site Green=Tags(s)

MAFLDNPTIILAHIRQSHVTSDDTGMCEMVLIDHDVDLEKTHPPSVPGDSGSEVQGSSGETQGYIYAQSV DITSSWDFGIRRRSNTAQRLERLRKERQNQIKCKNIQWKERNSKQSAQELKSLFEKKSLKEKPPSSGKQS ILSVRLEQCPLQLNNPFNEYSKFDGKGHVGTTATKKIDVYLPLHSSQDRLLPMTVVTMASARVQDLIGLI CWQYTSEGREPKLNDNVSAYCLHIAEDDGEVDTDFPPLDSNEPIHKFGFSTLALVEKYSSPGLTSKESLF VRINAAHGFSLIQVDNTKVTMKEILLKAVKRRKGSQKISGPQYRLEKQSEPNIAVDLESTLESQNAWEFC LVRENSSRADGVFEEDSQIDIATVQDMLSSHHYKSFKVSMIHRLRFTTDVQLGISGDKVEIDPVTNQKAS TKFWIKQKPISIDCDLLCACDLAEEKSPSHAVFKLTYLSSHDYKHLYFESDAATVSEIVLKVNYILESRA

STARADYLAQKQRKLNRRTSFSFQKEKKSGQQ

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV** 

Tag: C-MYC/DDK

**Predicted MW:** 59.5 kDa

**Concentration:**  $>0.05 \mu g/\mu L$  as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

**Storage:** Store at -80°C after receiving vials.

**Stability:** Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 796319





## Mapkap1 (NM\_177345) Mouse Recombinant Protein - TP508361

**Locus ID:** 227743

UniProt ID:Q8BKH7RefSeq Size:3044Cytogenetics:2 BRefSeq ORF:1566

**Synonyms:** AI591529; D230039K05Rik; Sin1

**Summary:** 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.[UniProtKB/Swiss-Prot Function]