







Recombinant Human Target of rapamycin complex 2 subunit MAPKAP1(MAPKAP1)

| Product Code | CSB-EP857767HU |
|----------------|---|
| Relevance | 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. |
| Storage | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C. |
| Uniprot No. | Q9BPZ7 |
| Storage Buffer | Tris-based buffer,50% glycerol |
| Alias | Mitogen-activated protein kinase 2-associated protein 1 Stress-activated map kinase-interacting protein 1 Short name: SAPK-interacting protein 1 Short name: mSIN1 |
| Product Type | Recombinant Protein |
| Species | Homo sapiens (Human) |
| Purity | Greater than 90% as determined by SDS-PAGE. |
| Sequence | AFLDNPTIILAHIRQSHVTSDDTGMCEMVLIDHDVDLEKIHPPSMPGDSGSEIQ GSNGETQGYVYAQSVDITSSWDFGIRRRSNTAQRLERLRKERQNQIKCKNIQ WKERNSKQSAQELKSLFEKKSLKEKPPISGKQSILSVRLEQCPLQLNNPFNEY SKFDGKGHVGTTATKKIDVYLPLHSSQDRLLPMTVVTMASARVQDLIGLICWQ YTSEGREPKLNDNVSAYCLHIAEDDGEVDTDFPPLDSNEPIHKFGFSTLALVEK YSSPGLTSKESLFVRINAAHGFSLIQVDNTKVTMKEILLKAVKRRKGSQKVSGP QYRLEKQSEPNVAVDLDSTLESQSAWEFCLVRENSSRADGVFEEDSQIDIATV QDMLSSHHYKSFKVSMIHRLRFTTDVQLGISGDKVEIDPVTNQKASTKFWIKQK PISIDSDLLCACDLAEEKSPSHAIFKLTYLSNHDYKHLYFESDAATVNEIVLKVNY ILESRASTARADYFAQKQRKLNRRTSFSFQKEKKSGQQ |









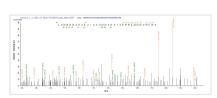
| Research Area | Signal Transduction |
|----------------------------|---|
| Source | E.coli |
| Gene Names | MAPKAP1 |
| Expression Region | 2-522aa |
| Notes | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week. |
| Tag Info | N-terminal 6xHis-SUMO-tagged |
| Mol. Weight | 75.0kDa |
| Protein Description | Full Length of Mature Protein |
| | |

Image 116 kDa 66.2 kDa 45 kDa 35 kDa 25 kDa

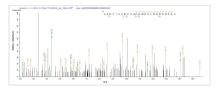
18.4 kDa

14.4 kDa

(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP857767HU could indicate that this peptide derived from E.coli-expressed Homo sapiens (Human) MAPKAP1.



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