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# MAP2K1IP1 Antibody (monoclonal) (M03)

Mouse monoclonal antibody raised against a partial recombinant MAPKSP1.
Catalog # AT2771a

## Product Information

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|---|---|
| **Application** | WB |
| **Primary Accession** | Q9UHA4 |
| **Other Accession** | NM_021970 |
| **Reactivity** | Human |
| **Host** | mouse |
| **Clonality** | monoclonal |
| **Isotype** | IgG1 Kappa |
| **Clone Names** | 2A4 |
| **Calculated MW** | 13623 |

## Additional Information

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|---|---|
| **Gene ID** | 8649 |
| **Other Names** | Ragulator complex protein LAMTOR3, Late endosomal/lysosomal adaptor and MAPK and MTOR activator 3, MEK-binding partner 1, Mp1, Mitogen-activated protein kinase kinase 1-interacting protein 1, Mitogen-activated protein kinase scaffold protein 1, LAMTOR3, MAP2K1IP1, MAPKSP1 |
| **Target/Specificity** | MAPKSP1 (NP_068805, 1 a.a. ~ 87 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa. |
| **Dilution** | WB~~1:500~1000 |
| **Format** | Clear, colorless solution in phosphate buffered saline, pH 7.2 . |
| **Storage** | Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing. |
| **Precautions** | MAP2K1IP1 Antibody (monoclonal) (M03) is for research use only and not for use in diagnostic or therapeutic procedures. |

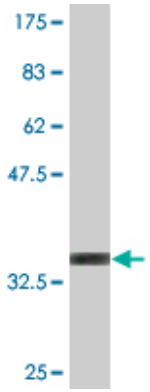
## Background

This gene encodes a scaffold protein that functions in the extracellular signal-regulated kinase (ERK) cascade. The protein is localized to late endosomes by the mitogen-activated protein-binding protein-interacting protein, and binds specifically to MAP kinase kinase MAP2K1/MEK1, MAP kinase MAPK3/ERK1, and MAP kinase MAPK1/ERK2. Studies of the orthologous gene in mouse indicate that it regulates late endosomal traffic and cell proliferation. Multiple transcript variants are expressed by this gene, but only one variant is thought to express a protein.

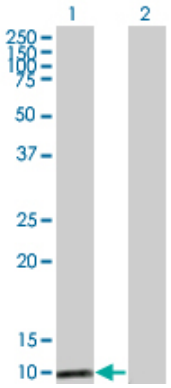
## References

Ragulator-Rag complex targets mTORC1 to the lysosomal surface and is necessary for its activation by amino acids. Sancak Y, et al. Cell, 2010 Apr 16. PMID 20381137.RACK1 targets the extracellular signal-regulated kinase/mitogen-activated protein kinase pathway to link integrin engagement with focal adhesion disassembly and cell motility. Vomastek T, et al. Mol Cell Biol, 2007 Dec. PMID 17908799.Regulation of protein phosphorylation within the MKK1-ERK2 complex by MP1 and the MP1*P14 heterodimer. Brahma A, et al. Arch Biochem Biophys, 2007 Apr 1. PMID 17254543.p14-MP1-MEK1 signaling regulates endosomal traffic and cellular proliferation during tissue homeostasis. Teis D, et al. J Cell Biol, 2006 Dec 18. PMID 17178906.Glial-derived neurotrophic factor (GDNF) prevents ethanol (EtOH) induced B92 glial cell death by both PI3K/AKT and MEK/ERK signaling pathways. Villegas SN, et al. Brain Res Bull, 2006 Dec 11. PMID 17113937.

## Images




Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (35.31 KDa) .




Western Blot analysis of MAPKSP1 expression in transfected 293T cell line by MAPKSP1 monoclonal antibody (M03), clone 2A4.

Lane 1: MAPKSP1 transfected lysate(13.623 KDa).
Lane 2: Non-transfected lysate.