

MAP2K1IP1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP55243

Specification

MAP2K1IP1 Polyclonal Antibody - Product Information

Application IHC-P, IHC-F, IF, ICC, E

Primary Accession
Reactivity
Rat, Bovine
Host
Clonality
Calculated MW
Rat, Bovine
Rabbit
Polyclonal
13.6 KDa

Physical State
Liquid
Immunogen
KLH conjugated synthetic peptide derived

laG

from human MAP2K1IP1

Epitope Specificity 5-100/124

Isotype
Purity
affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

SUBCELLULAR LOCATION
SIMILARITY

Proclin300 and 50% Glycerol.

Late endosome membrane.

Belongs to the LAMTOR3 family.

Important Note

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

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. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. A pseudogene of this gene is located on the long arm of chromosome 13. [provided by RefSeq, Aug 2011]

MAP2K1IP1 Polyclonal Antibody - Additional Information

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

Dilution

IHC-P~~N/A<br \> IHC-F~~N/A<br \> <span class</pre>



="dilution_IF">IF \sim 1:50 \sim 200<br \>ICC \sim N/A<br \>E \sim N/A

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 $^{\circ}$ C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 $^{\circ}$ C.

MAP2K1IP1 Polyclonal Antibody - Protein Information

Name LAMTOR3 (HGNC:15606)

Synonyms MAP2K1IP1, MAPKSP1

Function

As part of the Ragulator complex it is involved in amino acid sensing and activation of mTORC1, a signaling complex promoting cell growth in response to growth factors, energy levels, and amino acids (PubMed: 20381137, PubMed:22980980, PubMed:28935770, PubMed:29107538, PubMed:29123114, PubMed:29158492, PubMed:30181260). Activated by amino acids through a mechanism involving the lysosomal V-ATPase, the Ragulator plays a dual role for the small GTPases Rag (RagA/RRAGA, RagB/RRAGB, RagC/RRAGC and/or RagD/RRAGD): it (1) acts as a guanine nucleotide exchange factor (GEF), activating the small GTPases Rag and (2) mediates recruitment of Rag GTPases to the lysosome membrane (PubMed:22980980, PubMed:28935770, PubMed:29107538, PubMed:29123114, PubMed:29158492, PubMed:30181260). Activated Ragulator and Rag GTPases function as a scaffold recruiting mTORC1 to lysosomes where it is in turn activated (PubMed:22980980, PubMed:28935770, PubMed:29107538, PubMed:29123114, PubMed:29158492, PubMed:30181260). Adapter protein that enhances the efficiency of the MAP kinase cascade facilitating the activation of MAPK2 (By similarity).

Cellular Location

Late endosome membrane {ECO:0000250|UniProtKB:088653}; Peripheral membrane protein {ECO:0000250|UniProtKB:088653}; Cytoplasmic side {ECO:0000250|UniProtKB:088653}. Note=Recruited to lysosome and endosome membranes by LAMTOR1. {ECO:0000250|UniProtKB:088653}

MAP2K1IP1 Polyclonal Antibody - Protocols

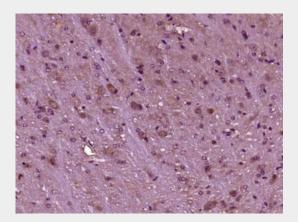




Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

MAP2K1IP1 Polyclonal Antibody - Images



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (MAP2K1IP1) Polyclonal Antibody, Unconjugated (bs-13688R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.