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Mouse Aak1 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP14604c

Specification

Mouse Aak1 Antibody (Center) Blocking Peptide - Product Information

Primary Accession Q3UHJ0

Mouse Aak1 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 269774

Other Names
AP2-associated protein kinase 1, Adaptor-associated kinase 1, Aak1, Kiaa1048

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Mouse Aak1 Antibody (Center) Blocking Peptide - Protein Information

Name Aak1

Synonyms Kiaa1048

Function
Regulates clathrin-mediated endocytosis by phosphorylating the AP2M1/mu2 subunit of the adaptor protein complex 2 (AP-2) which ensures high affinity binding of AP-2 to cargo membrane proteins during the initial stages of endocytosis. Preferentially, may phosphorylate substrates on threonine residues. Regulates phosphorylation of other AP-2 subunits as well as AP-2 localization and AP-2-mediated internalization of ligand complexes. Phosphorylates NUMB and regulates its cellular localization, promoting NUMB localization to endosomes. Binds to and stabilizes the activated form of NOTCH1, increases its localization in endosomes and regulates its transcriptional activity.

Cellular Location
Cell membrane {ECO:0000250|UniProtKB:F1MH24}; Peripheral membrane protein {ECO:0000250|UniProtKB:F1MH24}. Membrane, clathrin-coated pit {ECO:0000250|UniProtKB:P0C1X8}. Presynapse {ECO:0000250|UniProtKB:P0C1X8}. Note=Active when found in clathrin- coated pits at the plasma membrane. In neuronal cells, enriched at presynaptic terminals. In non-neuronal cells, enriched at leading edge of migrating cells. {ECO:0000250|UniProtKB:P0C1X8}

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Mouse Aak1 Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

Mouse Aak1 Antibody (Center) Blocking Peptide - Images

Mouse Aak1 Antibody (Center) Blocking Peptide - Background

Aak1 phosphorylates the AP2M1/mu2 subunit of the adaptor protein complex 2 (AP-2). May play a role in regulating aspects of clathrin-mediated endocytosis (By similarity).

Mouse Aak1 Antibody (Center) Blocking Peptide - References

Munton, R.P., et al. Mol. Cell Proteomics 6(2):283-293(2007)Nishimura, M., et al. DNA Res. 11(5):315-323(2004)Jha, A., et al. J. Biol. Chem. 279(3):2281-2290(2004)Zambrowicz, B.P., et al. Proc. Natl. Acad. Sci. U.S.A. 100(24):14109-14114(2003)Hansen, J., et al. Proc. Natl. Acad. Sci. U.S.A. 100(17):9918-9922(2003)