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Mouse Aak1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14604c

Specification

Mouse Aak1 Antibody (Center) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	Q3UHJ0
Other Accession	P0C1X8, F1SPM8, Q2M2I8, F1MH24, NP_808430.2, NP_001035195.1
Reactivity	**Mouse**
Predicted	**Bovine, Human, Pig, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**103346**
Antigen Region	**279-306**

Mouse Aak1 Antibody (Center) - Additional Information

Gene ID 269774

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

Target/Specificity
This Mouse Aak1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 279-306 amino acids from the Central region of mouse Aak1.

Dilution
WB~~1:1000
IHC-P~~1:10~50
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Mouse Aak1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Aak1 Antibody (Center) - Protein Information

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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.

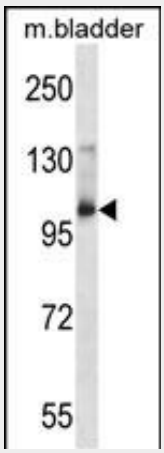
Cellular Location
Cell membrane {ECO:0000250|UniProtKB:F1MH24}; Peripheral membrane protein {ECO:0000250|UniProtKB:F1MH24}. Membrane, clathrin-coated pit {ECO:0000250|UniProtKB:P0C1X8}. Presynapse {ECO:0000250|UniProtKB:P0C1X8}. Note=Active when found in clathrin- coated pits at the plasma membrane.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

Mouse Aak1 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Mouse Aak1 Antibody (Center) - Images



Mouse Aak1 Antibody (Center) (Cat. #AP14604c) western blot analysis in mouse bladder tissue lysates (35ug/lane).This demonstrates the Aak1 antibody detected the Aak1 protein (arrow).

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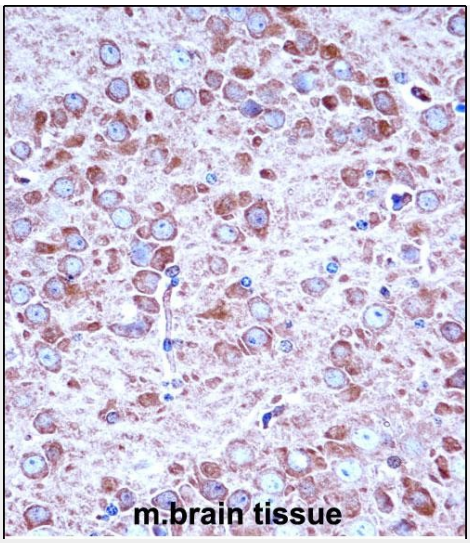

Mouse Aak1 Antibody (Center) (AP14604c)immunohistochemistry analysis in formalin fixed and paraffin embedded mouse brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of Mouse Aak1 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

Mouse Aak1 Antibody (Center) - 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) - 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)