

MARK1 / MARK Antibody (Internal)

Rabbit Polyclonal Antibody Catalog # ALS11114

Specification

MARK1 / MARK Antibody (Internal) - Product Information

Application IHC Primary Accession O9P0L2

Reactivity Human, Rabbit, Monkey

Host Rabbit
Clonality Polyclonal
Calculated MW 89kDa KDa

MARK1 / MARK Antibody (Internal) - Additional Information

Gene ID 4139

Other Names

Serine/threonine-protein kinase MARK1, 2.7.11.1, 2.7.11.26, MAP/microtubule affinity-regulating kinase 1, PAR1 homolog c, Par-1c, Par1c, MARK1 (HGNC:6896)

Target/Specificity

Human MARK1. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

Reconstitution & Storage

Long term: -70°C; Short term: +4°C

Precautions

MARK1 / MARK Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

MARK1 / MARK Antibody (Internal) - Protein Information

Name MARK1 (HGNC:6896)

Function

Serine/threonine-protein kinase (PubMed:23666762). Involved in cell polarity and microtubule dynamics regulation. Phosphorylates DCX, MAP2 and MAP4. Phosphorylates the microtubule-associated protein MAPT/TAU (PubMed:23666762). Involved in cell polarity by phosphorylating the microtubule-associated proteins MAP2, MAP4 and MAPT/TAU at KXGS motifs, causing detachment from microtubules, and their disassembly. Involved in the regulation of neuronal migration through its dual activities in regulating cellular polarity and microtubule dynamics, possibly by phosphorylating and regulating DCX. Also acts as a positive regulator of the Wnt signaling



Tel: 858.875.1900 Fax: 858.875.1999

pathway, probably by mediating phosphorylation of dishevelled proteins (DVL1, DVL2 and/or DVL3).

Cellular Location

Cell membrane; Peripheral membrane protein. Cytoplasm, cytoskeleton. Cytoplasm Cell projection, dendrite. Note=Appears to localize to an intracellular network.

Tissue Location

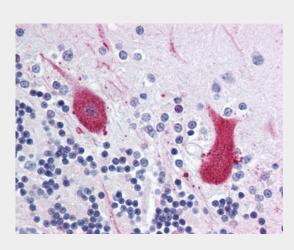
Highly expressed in heart, skeletal muscle, brain, fetal brain and fetal kidney.

MARK1 / MARK Antibody (Internal) - Protocols

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

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

MARK1 / MARK Antibody (Internal) - Images



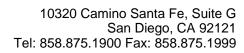
Anti-MARK1 antibody ALS11114 IHC of human brain, cerebellum.

MARK1 / MARK Antibody (Internal) - Background

Serine/threonine-protein kinase involved in cell polarity and microtubule dynamics regulation. Phosphorylates DCX, MAP2, MAP4 and MAPT/TAU. Involved in cell polarity by phosphorylating the microtubule-associated proteins MAP2, MAP4 and MAPT/TAU at KXGS motifs, causing detachment from microtubules, and their disassembly. Involved in the regulation of neuronal migration through its dual activities in regulating cellular polarity and microtubule dynamics, possibly by phosphorylating and regulating DCX. Also acts as a positive regulator of the Wnt signaling pathway, probably by mediating phosphorylation of dishevelled proteins (DVL1, DVL2 and/or DVL3).

MARK1 / MARK Antibody (Internal) - References

Lizcano I.M., et al. EMBO J. 23:833-843(2004). Zhou H.J., et al. Submitted (MAY-1999) to the EMBL/GenBank/DDBJ databases.





Nagase T.,et al.DNA Res. 7:143-150(2000). Ota T.,et al.Nat. Genet. 36:40-45(2004). Gregory S.G.,et al.Nature 441:315-321(2006).