

MARK2 Antibody

Catalog No: #33942

Package Size: #33942-1 50ul #33942-2 100ul

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

Description

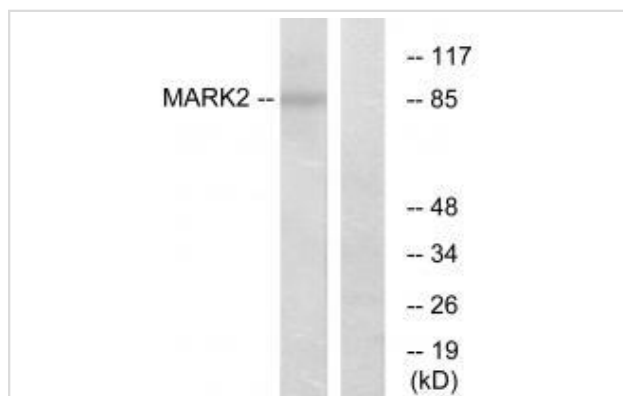
Product Name	MARK2 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Applications	WB IF
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous levels of total MARK2 protein.
Immunogen Type	Peptide
Immunogen Description	Synthesized peptide derived from N-terminal of human MARK2.
Target Name	MARK2
Other Names	EC 2.7.11.1; ELKL motif kinase 1; EMK; EMK1; MAP/microtubule affinity-regulating kinase 2
Accession No.	Swiss-Prot: Q7KZI7NCBI Gene ID: 2011
Uniprot	Q7KZI7
GeneID	2011;
SDS-PAGE MW	85kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

Western blotting: 1:500~1:3000

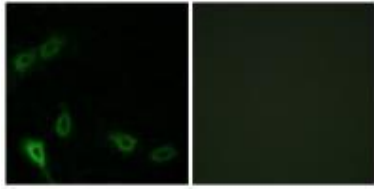
Immunofluorescence: 1:100~1:500

Images



Western blot analysis of extracts from COS-7 cells, using MARK2 antibody #33942.

Immunofluorescence analysis of A549 cells, using MARK2 antibody #33942.



Background

Serine/threonine-protein kinase involved in cell polarity and microtubule dynamics regulation. Phosphorylates CRTC2/TORC2, DCX, HDAC7, KIF13B, MAP2, MAP4, MAPT/TAU, and RAB11FIP2. Plays a key role in cell polarity by phosphorylating the microtubule-associated proteins MAP2, MAP4 and MAPT/TAU at KXGS motifs, causing detachment from microtubules, and their disassembly. Regulates epithelial cell polarity by phosphorylating RAB11FIP2. Involved in the regulation of neuronal migration through its dual activities in regulating cellular polarity and microtubule dynamics, possibly by phosphorylating and regulating DCX. Regulates axogenesis by phosphorylating KIF13B, promoting interaction between KIF13B and 14-3-3 and inhibiting microtubule-dependent accumulation of KIF13B. Also required for neurite outgrowth and establishment of neuronal polarity. Regulates localization and activity of some histone deacetylases by mediating phosphorylation of HDAC7, promoting subsequent interaction between HDAC7 and 14-3-3 and export from the nucleus. Also acts as a positive regulator of the Wnt signaling pathway, probably by mediating phosphorylation of dishevelled proteins (DVL1, DVL2 and/or DVL3). Modulates the developmental decision to build a columnar versus a hepatic epithelial cell apparently by promoting a switch from a direct to a transcytotic mode of apical protein delivery. Essential for the asymmetric development of membrane domains of polarized epithelial cells.

Espinosa L., Cytogenet. Cell Genet. 81:278-282(1998).

Lizcano J.M., EMBO J. 23:833-843(2004).

Taylor T.D., Nature 440:497-500(2006).

Note: This product is for in vitro research use only