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Recombinant Anti-MARK3 Rabbit mAb

Catalog # AP95322

Product Information

Application	WB, FC, IP, IF/IC
Primary Accession	P27448
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Monoclonal
Calculated MW	84429

Additional Information

Gene ID	4140
Other Names	CTAK1; EMK2; MAP/microtubule affinity-regulating kinase 3; C-TAK1; cTAK1; Cdc25C-associated protein kinase 1; ELKL motif kinase 2; EMK-2; Protein kinase STK10; Ser/Thr protein kinase PAR-1; Par-1a; Serine/threonine-protein kinase p78
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within human MARK3 protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) FC~~1:10~50 IP~~N/A IF/IC~~N/A
Format	Liquid in PBS, pH 7.3, 50% glycerol, 0.05% BSA, and 0.05% Proclin300.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

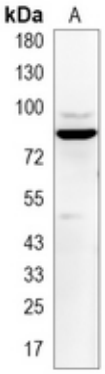
Name	MARK3
Synonyms	CTAK1, EMK2
Function	Serine/threonine-protein kinase (PubMed: 16822840, PubMed:16980613, PubMed:23666762). Involved in the specific phosphorylation of microtubule-associated proteins for MAP2 and MAP4. Phosphorylates the microtubule-associated protein MAPT/TAU (PubMed:23666762). Phosphorylates CDC25C on 'Ser-216' (PubMed:12941695). 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 (PubMed:16980613). Regulates localization and activity of MITF by mediating its phosphorylation, promoting subsequent interaction between MITF and 14-3-3 and retention in the cytosol (PubMed:16822840). Negatively regulates the Hippo signaling pathway and antagonizes the phosphorylation of LATS1. Cooperates with

DLG5 to inhibit the kinase activity of STK3/MST2 toward LATS1 (PubMed:28087714). Phosphorylates PKP2 and KSR1 (PubMed:12941695).

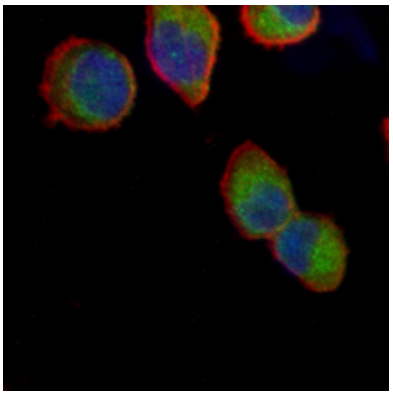
Cellular Location Cell membrane; Peripheral membrane protein. Cell projection, dendrite. Cytoplasm

Tissue Location Ubiquitous.

Images



Western blot analysis of MARK3 expression in K562 (A) whole cell lysates. (Predicted band size: 84 kD; Observed band size: 84 kD)



Immunofluorescent analysis of MARK3 staining in K562 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with an AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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