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Anti-MARK3 Antibody

Catalog # AP95939

Product Information

Application	WB, IHC, FC
Primary Accession	P27448
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Calculated MW	84429

Additional Information

Gene ID	4140
Other Names	CTAK1; EMK2; MAP/mIC, rotubule 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	Recombinant fusion protein of human MARK3 expressed in E. Coli
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 FC~~FC (1/100 - 1/200)
Format	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

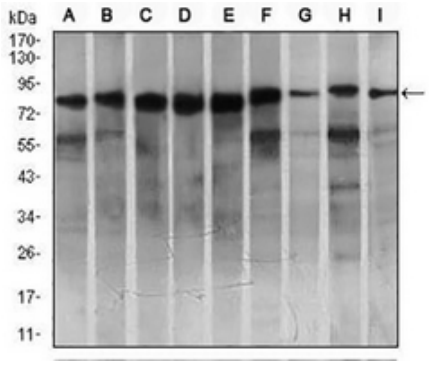
Name	MARK3
Synonyms	CTAK1, EMK2
Function	Serine/threonine-protein kinase (PubMed: 16822840, PubMed:16980613, PubMed:23666762). Involved in the specific phosphorylation of microtubule-associated proteins for MAP2 and MAP4. Phosphorylates the microtubule-associated protein MAPT/TAU (PubMed:23666762). Phosphorylates 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).

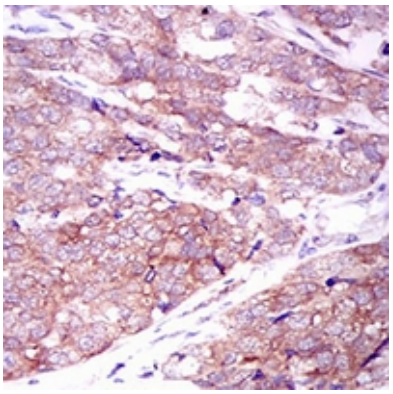
Cellular Location Cell membrane; Peripheral membrane protein. Cell projection, dendrite. Cytoplasm

Tissue Location Ubiquitous.

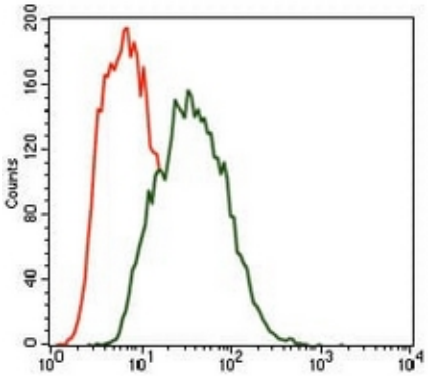
Images



Western blot analysis of MARK3 expression in Hela (A), SKNSH (B), K562 (C), HCT116 (D), HEK293 (E), 3T3L1 (F), NIH3T3 (G), Jurkat (H), A431 (I) whole cell lysates. (Predicted band size: 87 kD; Observed band size: 87 kD)



Immunohistochemical analysis of MARK3 staining in human bladder cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Flow cytometric analysis of SKNSH cells using Anti-MARK3 Antibody (green) and negative control (red).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.