10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# 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

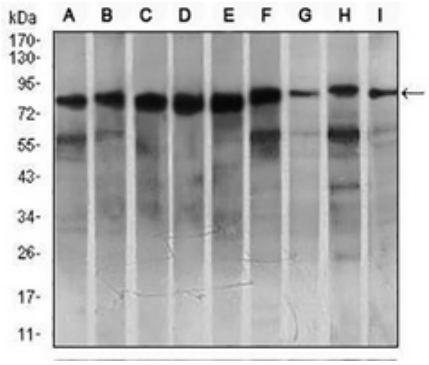
| | |
|---|---|
| **Name** | MARK3 |
| **Synonyms** | CTAK1, EMK2 |
| **Function** | Serine/threonine-protein kinase (PubMed: 16822840, PubMed:16980613, PubMed:23666762). Involved in the specific phosphorylation of microtubule-associated proteins for MAP2 and MAP4. Phosphorylates the microtubule-associated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

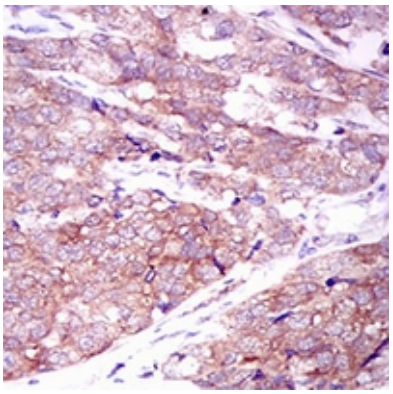
**Cellular Location** Cell membrane; Peripheral membrane protein. Cell projection, dendrite. Cytoplasm

**Tissue Location** Ubiquitous.

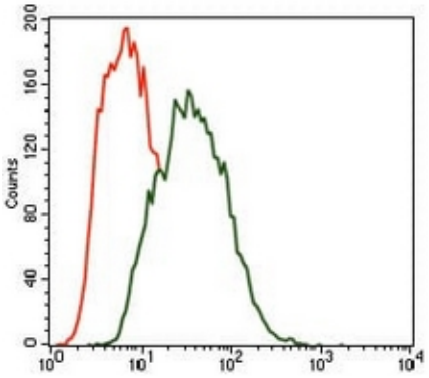
## Images




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).