

**Anti-MARK3 Antibody**  
**Rabbit polyclonal antibody to MARK3**  
**Catalog # AP60339****Specification**

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**Anti-MARK3 Antibody - Product Information**

Application	WB, IH, IF
Primary Accession	<a href="#">P27448</a>
Other Accession	<a href="#">Q03141</a>
Reactivity	Human, Mouse, Rat, Zebrafish, Chicken
Host	Rabbit
Clonality	Polyclonal
Calculated MW	84429

**Anti-MARK3 Antibody - 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**

Recognizes endogenous levels of MARK3 protein.

**Dilution**

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/100 - 1/500)  
IH~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/100 - 1/500)  
IF~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/100 - 1/500)

**Format**

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

**Storage**

Store at -20 °C. Stable for 12 months from date of receipt

**Anti-MARK3 Antibody - Protein Information****Name** MARK3**Synonyms** CTAK1, EMK2**Function**

Serine/threonine-protein kinase (PubMed: <a href="http://www.uniprot.org/citations/16822840" target="\_blank">16822840</a>, PubMed: <a href="http://www.uniprot.org/citations/16980613" target="\_blank">16980613</a>, PubMed: <a href="http://www.uniprot.org/citations/23666762" target="\_blank">23666762</a>)

target="\_blank">23666762</a>). Involved in the specific phosphorylation of microtubule-associated proteins for MAP2 and MAP4. Phosphorylates the microtubule-associated protein MAPT/TAU (PubMed:<a href="http://www.uniprot.org/citations/23666762" target="\_blank">23666762</a>). Phosphorylates CDC25C on 'Ser-216' (PubMed:<a href="http://www.uniprot.org/citations/12941695" target="\_blank">12941695</a>). 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:<a href="http://www.uniprot.org/citations/16980613" target="\_blank">16980613</a>). 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:<a href="http://www.uniprot.org/citations/16822840" target="\_blank">16822840</a>). 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:<a href="http://www.uniprot.org/citations/28087714" target="\_blank">28087714</a>). Phosphorylates PKP2 and KSR1 (PubMed:<a href="http://www.uniprot.org/citations/12941695" target="\_blank">12941695</a>).

### Cellular Location

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

### Tissue Location

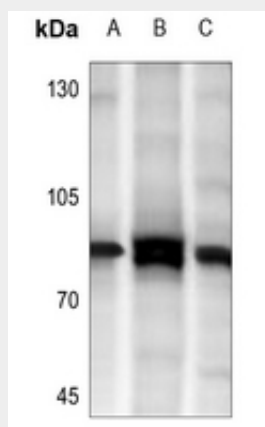
Ubiquitous.

## Anti-MARK3 Antibody - Protocols

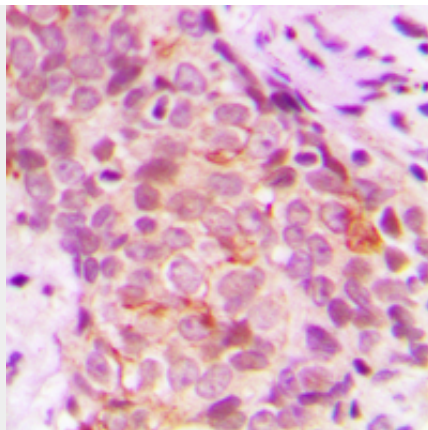
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

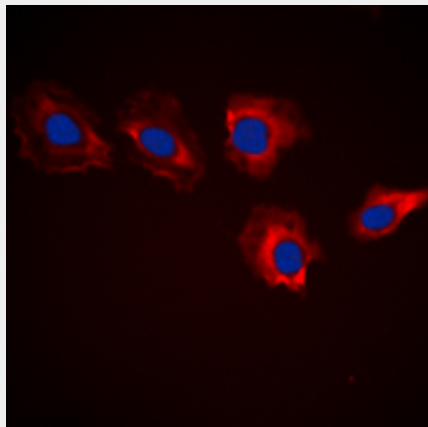
## Anti-MARK3 Antibody - Images



Western blot analysis of MARK3 expression in SHSY5Y (A), H9C2 (B), BV2 (C) whole cell lysates.



Immunohistochemical analysis of MARK3 staining in human breast 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.



Immunofluorescent analysis of MARK3 staining in HeLa 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 humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

#### **Anti-MARK3 Antibody - Background**

KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human MARK3. The exact sequence is proprietary.