

## Anti-MARK2 Rabbit Monoclonal Antibody Catalog # ABO15477

### Specification

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#### Anti-MARK2 Rabbit Monoclonal Antibody - Product Information

Application	WB, FC
Primary Accession	<a href="#">O7KZ17</a>
Host	Rabbit
Isotype	IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

#### Description

Anti-MARK2 Rabbit Monoclonal Antibody . Tested in WB, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

#### Anti-MARK2 Rabbit Monoclonal Antibody - Additional Information

Gene ID 2011

#### Other Names

Serine/threonine-protein kinase MARK2, 2.7.11.1, 2.7.11.26, ELKL motif kinase 1, EMK-1, MAP/microtubule affinity-regulating kinase 2, PAR1 homolog, PAR1 homolog b, Par-1b, Par1b, MARK2 {ECO:0000312|EMBL:AAH08771.2}, EMK1

#### Calculated MW

78 kDa, 82 kDa KDa

#### Application Details

WB 1:500-1:2000<br>FC 1:100

#### Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

#### Immunogen

A synthesized peptide derived from human MARK2

#### Purification

Affinity-chromatography

#### Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

#### Anti-MARK2 Rabbit Monoclonal Antibody - Protein Information

**Name** MARK2 {ECO:0000312|EMBL:AAH08771.2}

**Synonyms** EMK1

### Function

Serine/threonine-protein kinase (PubMed:<a href="http://www.uniprot.org/citations/23666762" target="\_blank">23666762</a>). Involved in cell polarity and microtubule dynamics regulation. Phosphorylates CRTC2/TORC2, DCX, HDAC7, KIF13B, MAP2, MAP4 and RAB11FIP2. Phosphorylates the microtubule-associated protein MAPT/TAU (PubMed:<a href="http://www.uniprot.org/citations/23666762" target="\_blank">23666762</a>). 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.

### Cellular Location

Cell membrane; Peripheral membrane protein. Cytoplasm. Lateral cell membrane. Cytoplasm, cytoskeleton. Cell projection, dendrite. Cytoplasm. Note=Phosphorylation at Thr-596 by PRKCZ/aPKC and subsequent interaction with 14-3-3 protein YWHAZ promotes relocation from the cell membrane to the cytoplasm

### Tissue Location

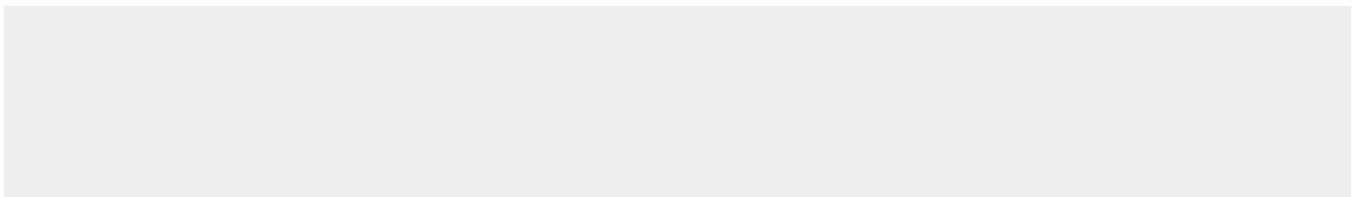
High levels of expression in heart, brain, skeletal muscle and pancreas, lower levels observed in lung, liver and kidney

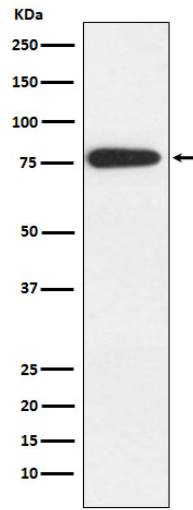
## Anti-MARK2 Rabbit Monoclonal Antibody - Protocols

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-MARK2 Rabbit Monoclonal Antibody - Images





Western blot analysis of MARK2 expression in Neuro-2a cell lysate.