

DATASHEET

MARK Rabbit Polyclonal Antibody

CAT. NO. APA10138

KEY FEATURES

Target	MARK	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat, Zebrafish	Clonality	Polyclonal
Applications	WB, IHC, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at -20°C

BACKGROUND

Serine/threonine-protein kinase . Involved in cell polarity and microtubule dynamics regulation. Phosphorylates DCX, MAP2 and MAP4. Phosphorylates the microtubule-associated protein MAPT/TAU . Involved in cell polarity by phosphorylating the microtubule-associated proteins MAP2, MAP4 and MAPT/TAU at KXGS motifs, causing detachment from microtubules, and their disassembly. Involved in the regulation of neuronal migration through its dual activities in regulating cellular polarity and microtubule dynamics, possibly by phosphorylating and regulating DCX. Also acts as a positive regulator of the Wnt signaling pathway, probably by mediating phosphorylation of dishevelled proteins (DVL1, DVL2 and/or DVL3).

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:100 - 1:200
IF/ICC	1:100 - 1:500

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

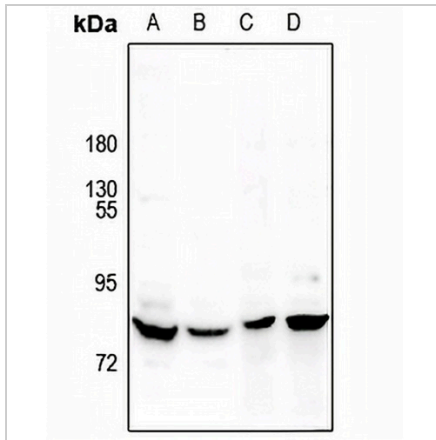
Description	Rabbit polyclonal antibody to MARK
Specificity	Recognizes endogenous levels of MARK protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human MARK. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 89; Observed: 89 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	MARK1; KIAA1477; MARK; Serine/threonine-protein kinase MARK1; MAP/microtubule affinity-regulating kinase 1; PAR1 homolog c; Par-1c; Par1c; MARK2; EMK1; Serine/threonine-protein kinase MARK2; ELKL motif kinase 1; EMK-1; MAP/microtubule affinity-regulating kinase 2; PAR1 homolog; PAR1 homolog b; Par-1b; Par1b; MARK3; 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; MARK4; KIAA1860; MARKL1; MAP/microtubule affinity-regulating kinase 4; MAP/microtubule affinity-regulating kinase-like 1
Gene Symbol	MARK1; MARK2; MARK3; MARK4
Entrez Gene	4139; 2011; 4140; 57787(Human); 226778; 13728; 17169; 232944(Mouse); 117016; 60328; 170577(Rat)
SwissProt	Q9P0L2; Q7KZ17; P27448; Q96L34(Human); Q8VHI5; Q05512; Q03141; Q8CIP4(Mouse); O08678; O08679; Q8VHF0(Rat)

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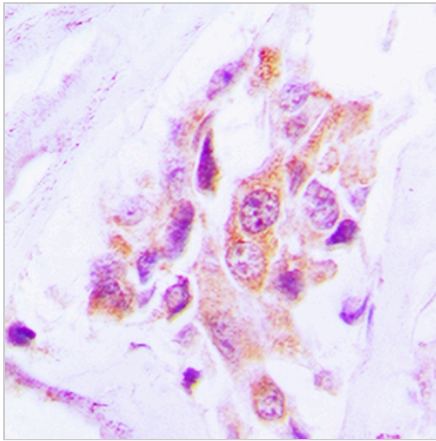
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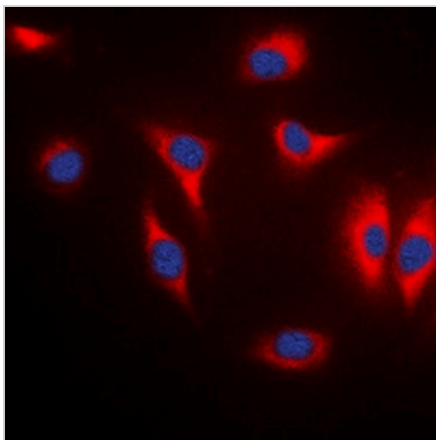
DATA



Western blot analysis of MARK expression in Panc1 (A), HEK293T (B), mouse brain (C), rat brain (D) whole cell lysates. (Predicted band size: 89; 87; 84; 82 kD; Observed band size: 89 kD)



Immunohistochemical analysis of MARK staining in human lung 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 MARK staining in A431 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).

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.