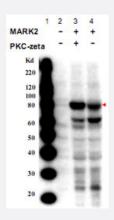


MARK2 (phospho T595) polyclonal antibody

Catalog # PAB10332 Size 100 ug

Applications



Western Blot (Transfected lysate)

Western blot using MARK2 (phospho T595) polyclonal antibody (Cat # PAB10332) shows detection of a band at ~82 kDa corresponding to phosphorylated MARK2 (arrowhead).

HEK293 cells were transfected with pCMV-3 x Flag-MARK2 plus pCMV-Flag-PKC-zeta (lane 3) or pCMV-3 x Flag-MARK2 only (lane 4).

Total cell lysates were run in a 4-12% Nupage SDS-gel and probed with MARK2 (phospho T595) polyclonal antibody (Cat # PAB10332).

An untransfected HEK293 cell lysate was used as a negative control (lane 2). MW markers are shown for size comparison (lane 1).

PKC-zeta appears to be involved in the phosphorylation of T595 on MARK2 as increased amounts of phospho- specific staining are observed in lysates from cells transfected with both MARK2 and PKC-zeta.

Personnel Communication, S. Shaw, NCI, Center for Cancer Research.

Specification	
Product Description	Rabbit polyclonal antibody raised against synthetic phosphopeptide of MARK2.
Immunogen	Synthetic phosphopeptide corresponding to residues surrounding T595 of human MARK2.
Host	Rabbit
Reactivity	Bovine, Dog, Human, Mouse, Rat
Specificity	Reactivity occurs against human MARK2 pT595 protein and This antibody is specific to the phospho rylated form of the protein. Reactivity with non-phosphorylated human MARK2 is minimal by ELISA. E xpect at least partial reactivity with other isoforms of MARK. The immunogen sequence is present in all forms identified to date and localizes to T595 on MARK2, T587 on MARK3, T591 on MARK1 and T568 on MARK4.
Form	Liquid



Product Information

Quality Control Testing	Antibody Reactive Against Synthetic Peptide.
Recommend Usage	ELISA (1:1000-1:3000)
	Western Blot (1:250-1:1000)
	The optimal working dilution should be determined by the end user.
Storage Buffer	In 20 mM KH ₂ PO ₄ , 150 mM NaCl, pH 7.2 (0.01% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C.
	Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul
	d be handled by trained staff only.

Applications

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- Immunofluorescence
- Enzyme-linked Immunoabsorbent Assay

Gene Info — MARK2		
Entrez GenelD	<u>2011</u>	
Protein Accession#	Q7KZI7;NP_059672	
Gene Name	MARK2	
Gene Alias	EMK1, MGC99619, PAR-1, Par1b	
Gene Description	MAP/microtubule affinity-regulating kinase 2	



Product Information

Omim ID	<u>600526</u>
Gene Ontology	<u>Hyperlink</u>
Gene Summary	This gene encodes a member of the Par-1 family of serine/threonine protein kinases. The protein is an important regulator of cell polarity in epithelial and neuronal cells, and also controls the stability of microtubules through phosphorylation and inactivation of several microtubule-associating proteins. The protein localizes to cell membranes. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq
Other Designations	ELKL motif kinase 1 Ser/Thr protein kinase PAR-1B protein-serine/threonine kinase serine/threonine kinase

Publication Reference

Splicing alterations in human renal allografts: detection of a new splice variant of protein kinase Par1/Emk1
whose expression is associated with an increase of inflammation in protocol biopsies of transplanted patients.

Hueso M, Beltran V, Moreso F, Ciriero E, Fulladosa X, Grinyo JM, Seron D, Navarro E.

Biochimica et Biophysica Acta 2004 May; 1689(1):58.

• Atypical PKC phosphorylates PAR-1 kinases to regulate localization and activity.

Hurov JB, Watkins JL, Piwnica-Worms H.

Current Biology 2004 Apr; 14(8):736.

Application: WB-Tr, Human, HeLa, HEK 293 cells

• PAR-1 is a Dishevelled-associated kinase and a positive regulator of Wnt signalling.

Sun TQ, Lu B, Feng JJ, Reinhard C, Jan YN, Fantl WJ, Williams LT.

Nature Cell Biology 2001 Jul; 3(7):628.

Disease

Coronary Artery Disease