

Recombinant Human MAP/Microtubule Affinity-Regulating Kinase 2, GST-tagged

Cat. No. MARK2-1057H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full-length human MARK2 was expressed by baculovirus in Sf9 insect cells.
Species	Human
Source	Sf9 Cells
Description	MARK2 or microtubule affinity-regulating kinase 2 is a member of the Par-1 family of serine/threonine protein kinases. MARK2 is an important regulator of cell polarity in epithelial and neuronal cells and controls the stability of microtubules through phosphorylation and inactivation of several microtubule-associating proteins (1). MARK2 is a key target of <i>H. pylori</i> CagA in the disorganization of gastric epithelial architecture underlying mucosal damage, inflammation, and carcinogenesis (2). MARK2 phosphorylates kinesin-like motor protein GAKIN/KIF13B to regulate axon formation. MARK2 function in the establishment of T cell polarity following engagement to an APC.
Applications	Kinase Assay; Western Blot
Molecular Weight	114 kDa
Expression System	Sf9 insect cells using baculovirus.
Form	Recombinant protein stored in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 10 mM

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	glutathione, 0.1 mM EDTA, 0.25 mM DTT, 0.1 mM PMSF, 25% glycerol.
Specific Activity	795 nmol/min/mg
Purity	> 70%
Concentration	0.1 ug/ul
Sequences	Full-length
Storage	Store product at -70oC. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.
Pathways	LKB1 signaling events; Notch signaling pathway; TNF-alpha/NF-kB Signaling Pathway; Wnt Signaling Pathway NetPath

GENE INFORMATION

Gene Name	MARK2 MAP/microtubule affinity-regulating kinase 2 [Homo sapiens]
Official Symbol	MARK2
Synonyms	MARK2; MAP/microtubule affinity-regulating kinase 2; EMK1; EMK-1; PAR-1; Par1b; MGC99619; serine/threonine-protein kinase MARK2; PAR1 homolog; OTTHUMP00000218338; OTTHUMP00000218339; OTTHUMP00000218340; OTTHUMP00000218343; OTTHUMP00000236749; OTTHUMP00000236750; OTTHUMP00000236758; OTTHUMP00000237224; ELKL motif kinase 1; Ser/Thr protein kinase PAR-1B; serine/threonine protein kinase EMK; EC=2.7.11.1; PAR1 homolog

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Gene ID	2011
mRNA Refseq	NM_001039469
Protein Refseq	NP_001034558
MIM	600526
UniProt ID	Q7KZI7
Chromosome Location	11q13.1
Function	ATP binding; magnesium ion binding; nucleotide binding; protein binding; protein serine/threonine kinase activity
PDB rendering based on 1y8g.	