

Recombinant human MARK4 protein ab105211

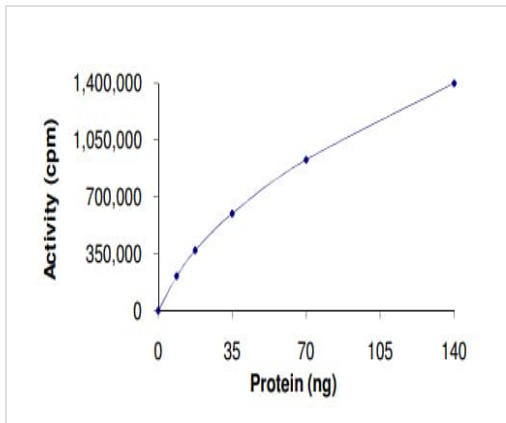
1 References 5 图像

描述	
产品名称	重组人MARK4蛋白
生物活性	The Specific activity of ab105211 was determined to be 1050 nmol/min/mg.
纯度	> 90 % SDS-PAGE. Purity was determined to be >90% by densitometry. Affinity purified.
表达系统	Baculovirus infected Sf9 cells
Accession	<u>Q96L34</u>
蛋白长度	Full length protein
无动物成分	No
性质	Recombinant
种属	Human
预测分子量	104 kDa including tags
氨基酸	1 to 752
技术指标	
Our Abpromise guarantee covers the use of ab105211 in the following tested applications.	
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.	
应用	Western blot Functional Studies SDS-PAGE
形式	Liquid
补充说明	ab204854 (Cdc25C peptide) can be utilized as a substrate for assessing kinase activity
制备和贮存	
稳定性和存储	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 7.50 Constituents: 0.307% Glutathione, 0.00174% PMSF, 0.00385% DTT, 0.79% Tris HCl, 0.00292% EDTA, 25% Glycerol (glycerin, glycerine), 0.87% Sodium chloride This product is an active protein and may elicit a biological response in vivo, handle with caution.

常规信息

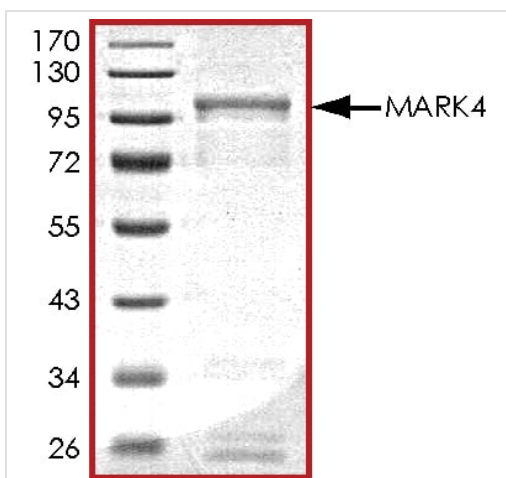
功能	Serine/threonine-protein kinase (PubMed:15009667, PubMed:14594945, PubMed:23666762, PubMed:23184942). Phosphorylates the microtubule-associated protein MAPT (PubMed:14594945, PubMed:23666762). Also phosphorylates the microtubule-associated proteins MAP2 and MAP4 (PubMed:14594945). Involved in regulation of the microtubule network, causing reorganization of microtubules into bundles (PubMed:14594945, PubMed:25123532). Required for the initiation of axoneme extension during cilium assembly (PubMed:23400999). Regulates the centrosomal location of ODF2 and phosphorylates ODF2 in vitro (PubMed:23400999). Plays a role in cell cycle progression, specifically in the G1/S checkpoint (PubMed:25123532). Reduces neuronal cell survival (PubMed:15009667). Plays a role in energy homeostasis by regulating satiety and metabolic rate (By similarity). Promotes adipogenesis by activating JNK1 and inhibiting the p38MAPK pathway, and triggers apoptosis by activating the JNK1 pathway (By similarity). Phosphorylates mTORC1 complex member RPTOR and acts as a negative regulator of the mTORC1 complex, probably due to disruption of the interaction between phosphorylated RPTOR and the RAGA/RRAGC heterodimer which is required for mTORC1 activation (PubMed:23184942).
组织特异性	Ubiquitous. Isoform 2 is brain-specific (PubMed:11326310). Expressed at highest levels in brain and testis. Also expressed in heart, lung, liver, muscle, kidney and spleen (PubMed:14594945).
序列相似性	Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. SNF1 subfamily. Contains 1 KA1 (kinase-associated) domain. Contains 1 protein kinase domain. Contains 1 UBA domain.
发展阶段	Expressed at all stages of the mitotic cell cycle.
翻译后修饰	Ubiquitinated with 'Lys-29'- and 'Lys-33'-linked polyubiquitins which appear to impede LKB1-mediated phosphorylation. Deubiquitinated by USP9X. Phosphorylated at Thr-214 by STK11/LKB1 in complex with STE20-related adapter-alpha (STRADA) pseudo kinase and CAB39 (PubMed:14976552). Phosphorylated throughout the cell cycle (PubMed:25123532).
细胞定位	Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, microtubule organizing center. Cytoplasm, cytoskeleton, cilium basal body. Cytoplasm, cytoskeleton, cilium axoneme. Cytoplasm. Localized at the tips of neurite-like processes in differentiated neuroblast cells. Detected in the cytoplasm and neuropil of the hippocampus.

图片



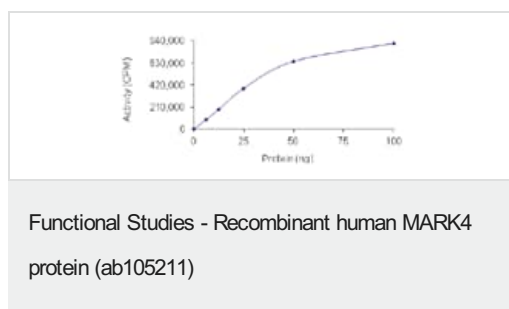
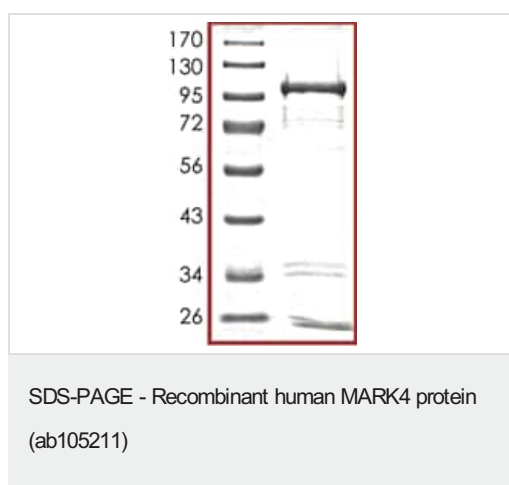
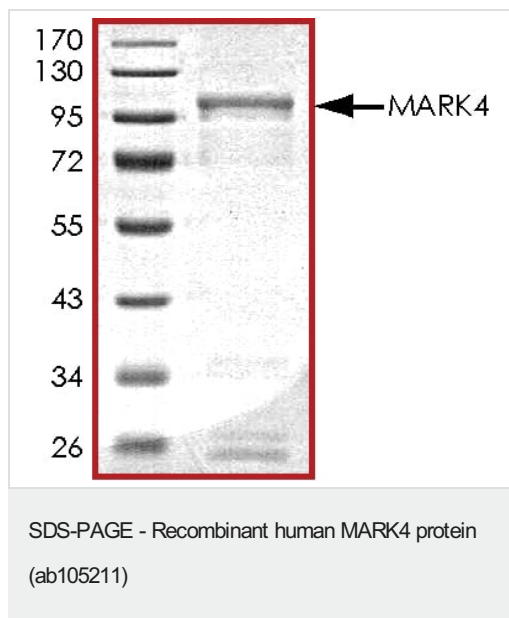
The specific activity of MARK4 (ab105211) was determined to be 1140 nmol/min/mg as per activity assay protocol

Functional Studies - Recombinant human MARK4 protein (ab105211)



SDS PAGE analysis of ab105211

SDS-PAGE - Recombinant human MARK4 protein (ab105211)



The Specific activity of ab105211 was determined to be 1050 nmol/min/mg.

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