钙钙调蛋白依赖性丝氨酸蛋白激酶抗体

产品货号： mlR11338

英文名称： CASK

中文名称： 钙/钙调蛋白依赖性丝氨酸蛋白激酶抗体

别　　名： CAGH39; Caki; Calcium/calmodulin dependent serine protein kinase; Calcium/calmodulin dependent serine protein kinase (MAGUK family); Calcium/calmodulin dependent serine protein kinase membrane associated guanylate kinase; Calcium/calmodulin-dependent serine protein kinase; CAMGUK; CAMGUK protein; CAMGUK, drosophila, homolog of antibody casK; CMG; CSKP_HUMAN; DXPri1; DXRib1; FGS4; hCASK; LIN 2; Lin 2 homolog; LIN2 antibody Lin2 homolog; MICPCH; MRXSNA; Pals3; Peripheral plasma membrane protein CASK; Protein lin-2 homolog; TNRC8; Trinucleotide repeat containing 8; Vertebtate LIN2 homolog.

研究领域： 神经生物学　信号转导　激酶和磷酸酶

抗体来源： Rabbit

克隆类型： Polyclonal

交叉反应 v Human, Mouse, Rat, Chicken, Pig, Cow, Horse, Rabbit, Sheep,

产品应用： ELISA=1:500-1000 IHC-P=1:400-800 IHC-F=1:400-800 ICC=1:100-500 IF=1:100-500 （石蜡切片需做抗原修复）

not yet tested in other applications.

optimal dilutions/concentrations should be determined by the end user.

分 子 量： 140kDa

细胞定位： 细胞核 细胞浆 细胞膜

性　　状： Lyophilized or Liquid

浓　　度： 1mg/ml

免 疫 原： KLH conjugated synthetic peptide derived from human CASK:651-750/926

亚　　型： IgG

纯化方法： affinity purified by Protein A

储 存 液： 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

保存条件： Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

PubMed： PubMed

产品介绍： The MAGUK (membrane-associated guanylate kinase homologs) family of proteins contain multiple protein-binding domains and are involved in cell junction organization, tumor suppression, and signaling. CASK (also designated LIN-2) belongs to a MAGUK subfamily which is characterized by a novel domain structure that consists of a calcium/calmodulin- dependent protein kinase domain followed by PDZ, SH3 and guanylate kinase-like (GUK) domains. CASK is expressed in rat brain where it binds to cell-surface proteins, such as neurexin and syndecan, and is thought to be involved in signaling at neuronal synapses. CASK translocates to the nucleus and interacts with Tbr-1 to form a complex, which binds to a specific DNA sequence (the T-element), and induces the expression of specific genes, including Reelin. CASK displays a transcription regulation function, which appears crucial for cerebrocortical development.

Function:

Multidomain scaffolding protein with a role in synaptic transmembrane protein anchoring and ion channel trafficking. Contributes to neural development and regulation of gene expression via interaction with the transcription factor TRB1. Binds to cell-surface proteins, including amyloid precursor protein, neurexins and syndecans. May mediate a link between the extracellular matrix and the actin cytoskeleton via its interaction with syndecan and with the actin/spectrin-binding protein 4.1.

Subunit:

Binds WHRN and NRXN1 cytosolic tail. Interacts with CASKIN1, APBA1, LIN7(A/B/C) and L27 domain of DLG1 and isoform 2 of DLG4 (By similarity). CASK and LIN7 form two mutually exclusive tripartite complexes with APBA1 or CASKIN1 (By similarity). Interacts with FCHSD2. Interacts with TSPYL2. Part of a complex containing CASK, TRB1 and TSPYL2 (By similarity). Identified in a complex with ACTN4, IQGAP1, MAGI2, NPHS1, SPTAN1 and SPTBN1 (By similarity). Interacts with KIRREL3.

Subcellular Location:

Nucleus. Cytoplasm. Cell membrane.

Tissue Specificity:

Ubiquitous. Expression is significantly greater in brain relative to kidney, lung, and liver and in fetal brain and kidney relative to lung and liver.

DISEASE:

Defects in CASK are the cause of mental retardation X-linked CASK-related (MRXCASK) [MIM:300749]. Mental retardation is characterized by significantly below average general intellectual functioning associated with impairments in adaptative behavior and manifested during the developmental period. Patients with mental retardation X-linked CASK-related can manifest a severe phenotype consisting of severe intellectual deficit, congenital or postnatal microcephaly, disproportionate brainstem and cerebellar hypoplasia (MICPCH Syndrome). A milder phenotype consists of mental retardation alone or associated with nystagmus. Defects in CASK are the cause of FG syndrome type 4 (FGS4) [MIM:300422]. FG syndrome (FGS) is an X-linked disorder characterized by mental retardation, relative macrocephaly, hypotonia and constipation.

Similarity:

Belongs to the MAGUK family.

Contains 1 guanylate kinase-like domain.

Contains 2 L27 domains.

Contains 1 PDZ (DHR) domain.

Contains 1 protein kinase domain.

Contains 1 SH3 domain.

SWISS:

O14936

Gene ID:

8573

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

产品图片