

G 蛋白偶联受体激酶 5 抗体

产品货号： mlR7540

英文名称： GRK5

中文名称： G 蛋白偶联受体激酶 5 抗体

别名： G protein coupled receptor kinase 5; G protein coupled receptor kinase GRK5; G protein-coupled receptor kinase 5; G protein-coupled receptor kinase GRK5; GPRK5; GRK5; GRK5_HUMAN.

研究领域： 心血管 细胞生物 信号转导 转录调节因子 激酶和磷酸酶 G 蛋白偶联受体 G 蛋白信号

抗体来源： Rabbit

克隆类型： Polyclonal

交叉反应： Human, Mouse, Rat, Dog, Pig, Cow, Horse,

产品应用： WB=1:500-2000 ELISA=1:500-1000 IHC-P=1:400-800 IHC-F=1:400-800 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 : 66kDa

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 GRK5:181-290/590

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 : This gene encodes a member of the guanine nucleotide-binding protein (G protein)-coupled receptor kinase subfamily of the Ser/Thr protein kinase family. The protein phosphorylates the activated forms of G protein-coupled receptors thus initiating their deactivation. It has also been shown to play a role in regulating the motility of polymorphonuclear leukocytes (PMNs). [provided by RefSeq, Jul 2008].

Function:

Serine/threonine kinase that phosphorylates preferentially the activated forms of a variety of G-protein-coupled receptors (GPCRs). Such receptor phosphorylation initiates beta-arrestin-mediated receptor desensitization, internalization, and signaling events leading to their down-regulation. Phosphorylates a variety of GPCRs, including adrenergic receptors, muscarinic acetylcholine receptors (more specifically Gi-coupled M2/M4 subtypes), dopamine receptors and opioid receptors. In addition to GPCRs, also phosphorylates various substrates: Hsc70-interacting protein/ST13, TP53/p53, HDAC5, and arrestin-1/ARRB1. Phosphorylation of ARRB1 by GRK5 inhibits G-protein independent MAPK1/MAPK3 signaling downstream of 5HT4-receptors. Phosphorylation of HDAC5, a repressor of myocyte enhancer factor 2 (MEF2) leading to nuclear export of HDAC5 and allowing MEF2-mediated transcription. Phosphorylation of TP53/p53, a crucial tumor suppressor, inhibits TP53/p53-mediated apoptosis. Phosphorylation of ST13 regulates internalization of the chemokine receptor. Phosphorylates rhodopsin (RHO) (in vitro) and a non G-protein-coupled receptor, LRP6 during Wnt signaling (in vitro).

Subunit:

Interacts with ST13 (via the C-terminus 303-319 AA). Interacts with TP53/p53. Interacts with HTR4 (via C-terminus 330-346 AA); this interaction is promoted by 5-HT (serotonin). Interacts with HDAC5.

Subcellular Location:

Cytoplasm. Nucleus. Cell membrane; Peripheral membrane protein. Note=Predominantly localized at the plasma membrane; targeted to the cell surface through the interaction with phospholipids. Nucleus localization is regulated in a GPCR and Ca(2+)/calmodulin-dependent fashion.

Tissue Specificity:

Highest levels in heart, placenta, lung, skeletal muscle, brain, liver, pancreas, kidney.

Post-translational modifications:

Autophosphorylated. Autophosphorylation may play a critical role in the regulation of GRK5 kinase activity.

Similarity:

Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. GPRK subfamily.

Contains 1 AGC-kinase C-terminal domain.

Contains 1 protein kinase domain.

Contains 1 RGS domain.

SWISS:

P34947

Gene ID:

2869

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

