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Datasheet for ABIN7317746 GRK5 Protein (His tag)

Overview

Quantity:	50 µg
Target:	GRK5
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This GRK5 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human GRK5/GPRK5 Protein (His Tag)
Sequence:	Met 1-Ser 590
Characteristics:	A DNA sequence encoding the human GRK5 (NP_005299.1) (Met 1-Ser 590) was fused with a polyhistidine tag at the C-terminus.
Purity:	> 90 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

Target Details

Target:	GRK5
Alternative Name:	GRK5/GPRK5 (GRK5 Products)
Background:	Background: G protein-coupled receptor kinase 5, also known as G protein-coupled receptor kinase GRK5 and GRK5, is a member of the protein kinase superfamily, AGC Ser/Thr protein kinase family and GPRK subfamily. GRKs specifically phosphorylate agonist-occupied G

Target Details

protein-coupled receptors at the inner surface of the plasma membrane (PM), leading to receptor desensitization. GRKs utilize a variety of mechanisms to bind tightly, and sometimes reversibly, to cellular membranes. GRKs play an important role in mediating agonist-specific desensitization of numerous G protein-coupled receptors. GRK5 contains one AGC-kinase C-terminal domain, one protein kinase domain and one RGS domain. GRK5 specifically phosphorylates the activated forms of G protein-coupled receptors. Phospholipid-stimulated autophosphorylation may represent a novel mechanism for membrane association and regulation of GRK5 activity. GRK5 deficiency significantly exaggerates microgliosis and astrogliosis in the presence of an inflammatory initiator, such as the excess fibrillar Abeta and the subsequent active inflammatory reactions. GRK5 deficiency has been linked to early Alzheimer's disease in humans and mouse models of the disease.

Synonym: GPRK5

Molecular Weight: 69 kDa

NCBI Accession: [NP_005299](#)

Pathways: [Myometrial Relaxation and Contraction](#), [Regulation of G-Protein Coupled Receptor Protein Signaling](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile 50 mM Tris, 100 mM NaCl, 0.5 mM PMSF, 1 mM DTT, 0.5 mM EDTA, 10 % glycerol, pH 7.4

Storage: 4 °C, -20 °C, -80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.