# Human GRK6 / GPRK6 Protein (His & GST Tag)

Catalog Number: 11752-H20B



## **General Information**

### Gene Name Synonym:

GPRK6

#### **Protein Construction:**

A DNA sequence encoding the human GRK6 isofrom B (P43250-2) (Met 1-Arg 589) was fused with the N-terminal polyhistidine-tagged GST tag at the N-terminus

Source: Human

Expression Host: Baculovirus-Insect Cells

**QC** Testing

Purity: > 93 % as determined by SDS-PAGE

**Bio Activity:** 

The specific activity was determined to be 7 nmol/min/mg using casein as substrate.

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70  $^{\circ}\mathrm{C}$ 

Predicted N terminal: Me

**Molecular Mass:** 

The recombinant human GRK6/GST chimera consists of 826 amino acids and has a calculated molecular mass of 95.1 kDa. It migrates as an approximately 85 kDa band in SDS-PAGE under reducing conditions.

#### Formulation:

Supplied as sterile 20mM Tris, 500mM NaCl, 2mM GSH, 0.5mM PMSF, pH 7 4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## **Usage Guide**

## Storage:

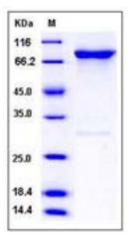
Store it under sterile conditions at  $-20^{\circ}$ C to  $-80^{\circ}$ C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

#### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

#### SDS-PAGE:



# **Protein Description**

G protein-coupled receptor kinase 6, also known as G protein-coupled receptor kinase GRK6, GRK6 and GPRK6, is a lipid-anchor protein which belongs to theprotein kinase superfamily, AGC Ser/Thr protein kinase family and GPRK subfamily. GRK6 / GPRK6 contains oneAGC-kinase C-terminal domain, oneprotein kinase domain and oneRGS domain. This protein phosphorylates the activated forms of G protein-coupled receptors thus initiating their deactivation. Several transcript variants encoding different isoforms have been described. GRK6 / GPRK6 is widely expressed. GRK6 / GPRK6 silencing causes suppression of signal transducer and activator of transcription 3 (STAT3) phosphorylation associated with reduction in MCL1 levels and phosphorylation, illustrating a potent mechanism for the cytotoxicity of GRK6 inhibition in multiple myeloma (MM) tumor cells. GRK6 also appears to be involved in responses to morphine. Inhibition of GRK6 represents a uniquely targeted novel therapeutic strategy in human multiple myeloma.

## References

1.Ghadessy,R.S. et al., 2003, Br J Pharmacol 138 (4):660-70. 2.Murga,C. et al., 2009, Brain Behav Immun. 23 (1):16-7. 3.Tiedemann,R.E. et al., 2010, Blood 115 (8):1594-604.

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

For US Customer: Fax: 267-657-0217 • Tel: 215-583-7898