

# Datasheet for ABIN7552350 **GRK2 Protein (AA 1-689) (His tag)**



## Overview

Quantity:	1 mg
Target:	GRK2 (ADRBK1)
Protein Characteristics:	AA 1-689
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This GRK2 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details	
Purpose:	Custom-made recombinat GRK2 Protein expressed in mammalien cells.
Sequence:	MADLEAVLAD VSYLMAMEKS KATPAARASK KILLPEPSIR SVMQKYLEDR GEVTFEKIFS
	QKLGYLLFRD FCLNHLEEAR PLVEFYEEIK KYEKLETEEE RVARSREIFD SYIMKELLAC
	SHPFSKSATE HVQGHLGKKQ VPPDLFQPYI EEICQNLRGD VFQKFIESDK FTRFCQWKNV
	ELNIHLTMND FSVHRIIGRG GFGEVYGCRK ADTGKMYAMK CLDKKRIKMK QGETLALNER
	IMLSLVSTGD CPFIVCMSYA FHTPDKLSFI LDLMNGGDLH YHLSQHGVFS EADMRFYAAE
	IILGLEHMHN RFVVYRDLKP ANILLDEHGH VRISDLGLAC DFSKKKPHAS VGTHGYMAPE
	VLQKGVAYDS SADWFSLGCM LFKLLRGHSP FRQHKTKDKH EIDRMTLTMA VELPDSFSPE
	LRSLLEGLLQ RDVNRRLGCL GRGAQEVKES PFFRSLDWQM VFLQKYPPPL IPPRGEVNAA
	DAFDIGSFDE EDTKGIKLLD SDQELYRNFP LTISERWQQE VAETVFDTIN AETDRLEARK
	KAKNKQLGHE EDYALGKDCI MHGYMSKMGN PFLTQWQRRY FYLFPNRLEW RGEGEAPQSL
	LTMEEIQSVE ETQIKERKCL LLKIRGGKQF ILQCDSDPEL VQWKKELRDA YREAQQLVQR
	LTMEEIQSVE ETQIKERKCL LLKIRGGKQF ILQCDSDPEL VQWKKELRDA YREAQQLVQR

VPKMKNKPRS PVVELSKVPL VQRGSANGL Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.

#### Characteristics:

Key Benefits:

- Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalien cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

### Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

#### Grade:

custom-made

## **Target Details**

Alternative Name:

GRK2 (ADRBK1)

**GRK2 (ADRBK1 Products)** 

## Background:

Beta-adrenergic receptor kinase 1 (Beta-ARK-1) (EC 2.7.11.15) (G-protein coupled receptor kinase 2),FUNCTION: Specifically phosphorylates the agonist-occupied form of the beta-adrenergic and closely related receptors, probably inducing a desensitization of them (PubMed:19715378). Key regulator of LPAR1 signaling (PubMed:19306925). Competes with RALA for binding to LPAR1 thus affecting the signaling properties of the receptor (PubMed:19306925). Desensitizes LPAR1 and LPAR2 in a phosphorylation-independent manner (PubMed:19306925). Positively regulates ciliary smoothened (SMO)-dependent Hedgehog (Hh) signaling pathway by facilitating the trafficking of SMO into the cilium and the stimulation of SMO activity (By similarity). Inhibits relaxation of airway smooth muscle in

## **Target Details**

Target Details	
	response to blue light (PubMed:30284927). {ECO:0000250 UniProtKB:P21146,
	ECO:0000269 PubMed:19306925, ECO:0000269 PubMed:19715378,
	ECO:0000269 PubMed:30284927}.
Molecular Weight:	79.6 kDa
UniProt:	P25098
Pathways:	EGFR Signaling Pathway, Neurotrophin Signaling Pathway, Regulation of G-Protein Coupled
	Receptor Protein Signaling, CXCR4-mediated Signaling Events, G-protein mediated Events,
	Interaction of EGFR with phospholipase C-gamma, Thromboxane A2 Receptor Signaling
Application Details	
Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies
	as well. As the protein has not been tested for functional studies yet we cannot offer a
	guarantee though.
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months