

# Datasheet for ABIN3120169 **GRK1 Protein (AA 1-561) (His tag)**



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## Overview

Quantity:	1 mg
Target:	GRK1
Protein Characteristics:	AA 1-561
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This GRK1 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

### **Product Details**

Sequence:

MDFGSLETVV ANSAFIAARG SFDGSSTPSS RDKKYLAKLR LPPLSKCEGL RDNLSLEFES
LCSEQPIGKR LFQQFLKTDE RHVPALELWK DIEDYDTADD DLRPQKAQAI LAEYLDPQGT
LFCNFLDQGM VTRVKEGPTG SQDGLFQPLL QATMEHLSQA PFQEYLESLY FLRFLQWKWL
EAQPIGEDWF LDFRVLGKGG FGEVSACQMK ATGKMYACKK LNKKRLKKKK GYQGAIVEKR
ILTKVHSRFI VSLAYAFETK TDLCLVMTIM NGGDVRYHIY NVDEDNPGFS EPRAIYYTAQ
IISGLEHLHQ RRIVYRDLKP ENVLLDNDGN IRISDLGLAV ELKEGQNKTK GYAGTPGFMA
PELLRGEEYD FSVDYFALGV TLYEMIAARG PFRARGEKVE NKELKQRIIS EPVKYPEKFS
QASKDFCEQL LEKDPEKRLG FRDGTCDALR ANVLFKDISW RQLEAGMLIP PFIPDSRTVY
AKNIQDVGAF STVKGVVFDK ADTEFFQEFA SGNCSIPWQE EMIETGLFGD LNVWRADGQM
PDDMKGITTE EAAPTAKSGM C

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

#### Characteristics:

- Made in Germany from design to production by highly experienced protein experts.
- Mouse Grk1 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- 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 will ensure that you receive a correctly folded protein.

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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receival of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of our recombinant proteins is measured using the absorbance at 280nm.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

#### Purification:

Sterility:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

- 1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
- 2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity: >95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Endotoxin Level: Protein is endotoxin free.

0.22 µm filtered

Grade: Crystallography grade

# **Target Details**

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Target:	GRK1
Alternative Name:	Grk1 (GRK1 Products)
Background:	Retina-specific kinase involved in the signal turnoff via phosphorylation of rhodopsin (RHO), the G protein- coupled receptor that initiates the phototransduction cascade. This rapid desensitization is essential for scotopic vision and permits rapid adaptation to changes in illumination. {ECO:0000269 PubMed:10097103, ECO:0000269 PubMed:10704496}.
Molecular Weight:	64.5 kDa Including tag.
UniProt:	Q9WVL4
Pathways:	Regulation of G-Protein Coupled Receptor Protein Signaling, Phototransduction
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 gurantee though.
Comment:	Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value 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:	Unlimited (if stored properly)