

# Datasheet for ABIN7564262 **DGKZ Protein (AA 1-929) (His tag)**



## Overview

Quantity:	1 mg
Target:	DGKZ
Protein Characteristics:	AA 1-929
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This DGKZ protein is labelled with His tag.

### **Product Details**

Purpose:	Custom-made recombinant Dgkz Protein expressed in mammalian cells.
Sequence:	MEPRDPSPEG RSSDSESASA SSSGSERDAG PEPDKAPRRL TKRRFPGLRL FGHRKAITKS
	GLQHLAPPPP TPGAPCGESE EQIQSTVDWS ESAVYGEHIW FETNVSGDFC YVGEQHCVAK
	MLPKSAPRKK CAACKIVVHT QCIKQLEKIN FRCKPSFRES GSRNVREPTF VRHHWVHRRR
	QDGKCRHCGK GFQQKFTFHS KEIVAISCSW CKQAYHSKVS CFMMQQIEEP CSLGVHAAVV
	IPPTWILRAR RPQNTLKASK KKKRASFKRR SSKKGPEEGR WRPFIIRPTP SPLMKPLLVF
	VNPKSGGNQG AKIIQSFLWY LNPRQVFDLS QGGPREALEM YRKVHNLRIL ACGGDGTVGW
	ILSTLDQLRL KPPPPVAILP LGTGNDLART LNWGGGYTDE PVSKILSHVE EGNVVQLDRW
	DLRAEPNPEA GPEERDDGAT DRLPLDVFNN YFSLGFDAHV TLEFHESREA NPEKFNSRFR
	NKMFYAGTAF SDFLMGSSKD LAKHIRVVCD GMDLTPKIQD LKPQCIVFLN IPRYCAGTMP
	WGHPGEHHDF EPQRHDDGYL EVIGFTMTSL AALQVGGHGE RLTQCREVLL TTAKAIPVQV
	DGEPCKLSAS RIRIALRNQA TMVQKAKRRS TAPLHSDQQP VPEQLRIQVS RVSMHDYEAL
	HYDKEQLKEA SVPLGTVVVP GDSDLELCRA HIERLQREPD GAGAKSPMCH QLSSKWCFLD

ATTASRFYRI DRAQEHLNYV TEIAQDEIYI LDPELLGASA RPDLPTPTSP LPASPCSPTP GSMQGDTALP QGEELIEAAK RNDCCKLQEL HRAGGDLMHR DQKSRTLLHH AVSTGSKEVV RYLLDHAPPE ILDAVEENGE TCLHQAAALG QRTICHYIVE AGASLMKTDL QGDTPRQRAE KAQDTELAAY LENRQHYQMI QREDQETAV 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. Specificity: If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer. Characteristics: Key Benefits: · Made to order protein - from design to production - by highly experienced protein experts. · Protein expressed in mammalian 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. > 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC) Purity: Grade: custom-made Target Details DGKZ Target: Alternative Name: Dgkz (DGKZ Products) Background: Diacylglycerol kinase zeta (DAG kinase zeta) (EC 2.7.1.107) (EC 2.7.1.93) (Diglyceride kinase zeta) (DGK-zeta), FUNCTION: Diacylglycerol kinase that converts diacylglycerol/DAG into phosphatidic acid/phosphatidate/PA and regulates the respective levels of these two bioactive lipids (PubMed:12883552). Thereby, acts as a central switch between the signaling pathways

activated by these second messengers with different cellular targets and opposite effects in numerous biological processes (PubMed:12883552). Also plays an important role in the biosynthesis of complex lipids (Probable). Does not exhibit an acyl chain-dependent substrate specificity among diacylglycerol species. Can also phosphorylate 1-alkyl-2-acylglycerol in vitro but less efficiently and with a preference for alkylacylglycerols containing an arachidonoyl group (By similarity). The biological processes it is involved in include T cell activation since it negatively regulates T-cell receptor signaling which is in part mediated by diacylglycerol (PubMed:12883552). By generating phosphatidic acid, stimulates PIP5KIA activity which regulates actin polymerization (By similarity). Through the same mechanism could also positively regulate insulin-induced translocation of SLC2A4 to the cell membrane (PubMed:27739494). Regulates RASGRP1 activity (By similarity). {ECO:0000250|UniProtKB:Q13574, ECO:0000269|PubMed:12883552, ECO:0000269|PubMed:27739494, ECO:0000305|PubMed:12883552}.

Molecular Weight: 104.0 kDa

UniProt: 080UP3

Pathways: Myometrial Relaxation and Contraction

#### **Application Details**

We expect the protein to work for functional studies. As the protein has not been tested for **Application Notes:** 

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. -80 °C Storage: Store at -80°C. Storage Comment:

12 months **Expiry Date:**