

# Datasheet for ABIN7556265 GK2 Protein (AA 1-554) (His tag)



### Overview

Quantity:	1 mg
Target:	GK2
Protein Characteristics:	AA 1-554
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This GK2 protein is labelled with His tag.

Product Details	
Purpose:	Custom-made recombinant Gk2 Protein expressed in mammalian cells.
Sequence:	MAASKQTSAG PLVGAVVQGT NSTRFLVFNS KTAELVCSHQ VELTQEYPKE GWVEQDPKEI
	LKSVYECIAK ACEKLAEVNI DISNIKAIGV SNQRETTVVW DKFTGDPLYN AVVWLDLRTQ
	STVETLTKKI PGNSNFVKSK TGLPLSTYFS AVKLRWMLDN LRPIQKAVEE GRAMFGTIDS
	WLIWCMTGGV NGGIHCTDVT NACRTMLFNI HSLEWDKDLC DFFEIPMSIL PNVCSSSEIY
	GLMTSGALEG VPISGCLGDQ SAALVGQMCF HEGQAKNTYG TGCFLLCNTG QKCVFSEHGL
	LTTLAYKLGK NKPVFYALEG SVAIAGAVIR WLRDNFEIIT TSGEVENLAR EVGTSYGCYF
	VPAFSGLYAP YWEPSARGII CGLTQFTNKC HIAFAALEAV CFQTREILDA MNRDCGIPLS
	HLQVDGGMTN NRILMQLQAD ILHIPVVKSV MPETTALGAA MAAGAAEGVN VWSLEPEDLS
	TILMERYEPQ IQATESEIRF STWKRAVMKS MGWVTAKDPE NGDNPVFSCL PLGFFIVSSM
	TLLIGARCVS TAEE 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.

### **Product Details**

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:
	<ul> <li>Made to order protein - from design to production - by highly experienced protein experts.</li> <li>Protein expressed in mammalian cells and purified in one-step affinity chromatography</li> <li>The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.</li> <li>State-of-the-art algorithm used for plasmid design (Gene synthesis).</li> </ul>
	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, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made
Target Details	
Target:	GK2
Alternative Name:	Gk2 (GK2 Products)
Background:	Glycerol kinase 2 (GK 2) (Glycerokinase 2) (EC 2.7.1.30) (ATP:glycerol 3-phosphotransferase 2)
	(Glycerol kinase, testis specific 2),FUNCTION: Key enzyme in the regulation of glycerol uptake
	and metabolism. Essential for male fertility and sperm mitochondrial sheath formation
	(PubMed:28852571, PubMed:30662012). Required for proper arrangement of crescent-like
	mitochondria to form the mitochondrial sheath during spermatogenesis. (PubMed:30662012).
	Can induce mitochondrial clustering through interactions with PLD6 and up-regulation of
	phosphatidic acid synthesis in the mitochondria (PubMed:28852571).
	{ECO:0000269 PubMed:28852571, ECO:0000269 PubMed:30662012}.
Molecular Weight:	60.6 kDa
UniProt:	Q9WU65

## **Application Details**

Application Notes:	We expect the protein to work for functional studies. 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