

Datasheet for ABIN7546512

Choline Kinase alpha Protein (CHKA) (AA 1-457) (His tag)



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Overview

Quantity:	1 mg
Target:	Choline Kinase alpha (CHKA)
Protein Characteristics:	AA 1-457
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Choline Kinase alpha protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat CHKA Protein expressed in mammalian cells.
Sequence:	<p>MKTKFCTGGE AEPSPGLLLL SCGSGSAAPA PGVGQQRDAA SDLESKQLGG QQPPLALPPP</p> <p>PPLPLPLPLP QPPPPQPPAD EQPEPRTRRR AYLWCKEFLP GAWRGLREDE FHISVIRGGL</p> <p>SNMLFQCSPD DTTATLGDEP RKVLLRLYGA ILQMRSCNKE GSEQAQKENE FQGAEAMVLE</p> <p>SVMFAILAER SLGPKLYGIF PQGRLEQFIP SRRLDTEELS LPDISAEIAE KMATFHGMKM</p> <p>PFNKEPKWLF GTMEKYLKEV LRIKFTEESR IKKLHKLLSY NLPLELENLR SLLESTPSPV</p> <p>VFCHNDCQEG NILLLEGREN SEKQKLMLID FEYSSYNYRG FDIGNHFCEW MYDYSYEKYP</p> <p>FFRANIRKYP TKKQQLHFIS SYLPAFQNDF ENLSTEEKSI IKEEMLLEVN RFALASHFLW</p> <p>GLWSIVQAKI SSIEFGYMDY AQARFDAYFH QKRKLGV Sequence without tag. The proposed</p> <p>Purification-Tag is based on experiences with the expression system, a different complexity</p> <p>of the protein could make another tag necessary. In case you have a special request, please</p> <p>contact us.</p>

Product Details

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.

Purity:

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

Grade:

custom-made

Target Details

Target:

Choline Kinase alpha (CHKA)

Alternative Name:

CHKA ([CHKA Products](#))

Background:

Choline kinase alpha (CK) (EC 2.7.1.32) (CHETK-alpha) (Ethanamine kinase) (EK) (EC 2.7.1.82), FUNCTION: Plays a key role in phospholipid biosynthesis by catalyzing the phosphorylation of free choline to phosphocholine, the first step in phosphatidylcholine biosynthesis (PubMed:19915674, PubMed:34077757, PubMed:17007874). Also phosphorylates ethanolamine, thereby contributing to phosphatidylethanolamine biosynthesis (PubMed:19915674, PubMed:17007874). Has higher activity with choline (PubMed:19915674, PubMed:17007874). May contribute to tumor cell growth (PubMed:19915674). {ECO:0000269|PubMed:17007874, ECO:0000269|PubMed:19915674, ECO:0000269|PubMed:34077757}., FUNCTION: [Isoform 1]: This isoform plays a key role in lipolysis of lipid droplets following glucose deprivation (PubMed:34077757). In response to glucose deprivation, phosphorylated by AMPK, promoting localization to lipid droplets (PubMed:34077757). Phosphorylation is followed by acetylation by KAT5, leading to dissociation of the homodimer into a monomer (PubMed:34077757). Monomeric CHKA

Target Details

isoform 1 is converted into a tyrosine-protein kinase, which phosphorylates lipid droplet structural proteins PLIN2 and PLIN3, leading to lipolysis of lipid droplets (PubMed:34077757). {ECO:0000269|PubMed:34077757}.

Molecular Weight: 52.2 kDa

UniProt: [P35790](#)

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