

Datasheet for ABIN7554281

Casein Kinase 1 gamma 2 Protein (AA 1-415) (His tag)



Overview

Quantity:	1 mg
Target:	Casein Kinase 1 gamma 2 (CSNK1G2)
Protein Characteristics:	AA 1-415
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Casein Kinase 1 gamma 2 protein is labelled with His tag.

Product Details	
Purpose:	Custom-made recombinant CSNK1G2 Protein expressed in mammalian cells.
Sequence:	MDFDKKGGKG ETEEGRRMSK AGGGRSSHGI RSSGTSSGVL MVGPNFRVGK KIGCGNFGEL
	RLGKNLYTNE YVAIKLEPIK SRAPQLHLEY RFYKQLSATE GVPQVYYFGP CGKYNAMVLE
	LLGPSLEDLF DLCDRTFTLK TVLMIAIQLI TRMEYVHTKS LIYRDVKPEN FLVGRPGTKR
	QHAIHIIDFG LAKEYIDPET KKHIPYREHK SLTGTARYMS INTHLGKEQS RRDDLEALGH
	MFMYFLRGSL PWQGLKADTL KERYQKIGDT KRATPIEVLC ENFPEEMATY LRYVRRLDFF
	EKPDYDYLRK LFTDLFDRSG FVFDYEYDWA GKPLPTPIGT VHTDLPSQPQ LRDKTQPHSK
	NQALNSTNGE LNADDPTAGH SNAPITAPAE VEVADETKCC CFFKRRKRKS LQRHK 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.

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, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade:

custom-made

Target Details

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Casein Kinase 1 gamma 2 (CSNK1G2)

Alternative Name:

CSNK1G2 (CSNK1G2 Products)

Background:

Casein kinase I isoform gamma-2 (CKI-gamma 2) (EC 2.7.11.1),FUNCTION: Serine/threonine-protein kinase. Casein kinases are operationally defined by their preferential utilization of acidic proteins such as caseins as substrates. It can phosphorylate a large number of proteins.

Participates in Wnt signaling (By similarity). Phosphorylates COL4A3BP/CERT, MTA1 and SMAD3. SMAD3 phosphorylation promotes its ligand-dependent ubiquitination and subsequent proteasome degradation, thus inhibiting SMAD3-mediated TGF-beta responses.

Hyperphosphorylation of the serine-repeat motif of COL4A3BP/CERT leads to its inactivation by dissociation from the Golgi complex, thus down-regulating ER-to-Golgi transport of ceramide and sphingomyelin synthesis. Triggers PER1 proteasomal degradation probably through phosphorylation (PubMed:15077195, PubMed:15917222, PubMed:18794808,

PubMed:19005213). Involved in brain development and vesicular trafficking and neurotransmitter releasing from small synaptic vesicles. Regulates fast synaptic transmission mediated by glutamate (By similarity). Involved in regulation of reactive oxygen species (ROS)

Target Details

Expiry Date:

12 months

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	levels (PubMed:37099597). {ECO:0000250 UniProtKB:P48729, ECO:0000250 UniProtKB:Q8BVP5, ECO:0000269 PubMed:15077195, ECO:0000269 PubMed:15917222, ECO:0000269 PubMed:18794808, ECO:0000269 PubMed:19005213, ECO:0000269 PubMed:37099597}.
Molecular Weight:	47.5 kDa
UniProt:	P78368
Pathways:	Hedgehog Signaling
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.