Datasheet for ABIN7554259

Casein Kinase 1 delta Protein (AA 1-415) (His tag)

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Overview

Quantity:	1 mg
Target:	Casein Kinase 1 delta (CSNK1D)
Protein Characteristics:	AA 1-415
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Casein Kinase 1 delta protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Purpose:	Custom-made recombinat CSNK1D Protein expressed in mammalien cells.
Sequence:	MELRVGNRYR LGRKIGSGSF GDIYLGTDIA AGEEVAIKLE CVKTKHPQLH IESKIYKMMQ GGVGIPTIRW CGAEGDYNVM VMELLGPSLE DLFNFCSRKF SLKTVLLLAD QMISRIEYIH SKNFIHRDVK PDNFLMGLGK KGNLVYIIDF GLAKKYRDAR THQHIPYREN KNLTGTARYA SINTHLGIEQ SRRDDLESLG YVLMYFNLGS LPWQGLKAAT KRQKYERISE KKMSTPIEVL CKGYPSEFAT YLNFCRSLRF DDKPDYSYLR QLFRNLFHRQ GFSYDYVFDW NMLKFGASRA ADDAERERRD REERLRHSRN PATRGLPSTA SGRLRGTQEV APPTPLTPTS HTANTSPRPV SGMERERKVS MRLHRGAPVN ISSSDLTGRQ DTSRMSTSQI PGRVASSGLQ SVVHR **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.**
Characteristics:	Key Benefits:

Product Details

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalien 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:	Casein Kinase 1 delta (CSNK1D)
Alternative Name:	CSNK1D (CSNK1D Products)
Background:	Casein kinase I isoform delta (CKI-delta) (CKId) (EC 2.7.11.1) (Tau-protein kinase CSNK1D) (EC 2.7.11.26),FUNCTION: Essential serine/threonine-protein kinase that regulates diverse cellular growth and survival processes including Wnt signaling, DNA repair and circadian rhythms. It can phosphorylate a large number of proteins. Casein kinases are operationally defined by their preferential utilization of acidic proteins such as caseins as substrates. Phosphorylates connexin-43/GJA1, MAP1A, SNAPIN, MAPT/TAU, TOP2A, DCK, HIF1A, EIF6, p53/TP53, DVL2, DVL3, ESR1, AIB1/NCOA3, DNMT1, PKD2, YAP1, PER1 and PER2. Central component of the circadian clock. In balance with PP1, determines the circadian period length through the regulation of the speed and rhythmicity of PER1 and PER2 phosphorylation. Controls PER1 and PER2 nuclear transport and degradation. YAP1 phosphorylation promotes its SCF(beta-TRCP) E3 ubiquitin ligase-mediated ubiquitination and subsequent degradation. DNMT1 phosphorylation reduces its DNA-binding activity. Phosphorylation of ESR1 and AIB1/NCOA3 stimulates their activity and coactivation. Phosphorylation of DVL2 and DVL3 regulates WNT3A signaling pathway that controls neurite outgrowth. Phosphorylates NEDD9/HEF1 (By similarity).

Target Details

	EIF6 phosphorylation promotes its nuclear export. Triggers down-regulation of dopamine receptors in the forebrain. Activates DCK in vitro by phosphorylation. TOP2A phosphorylation favors DNA cleavable complex formation. May regulate the formation of the mitotic spindle apparatus in extravillous trophoblast. Modulates connexin-43/GJA1 gap junction assembly by phosphorylation. Probably involved in lymphocyte physiology. Regulates fast synaptic transmission mediated by glutamate. {ECO:0000250|UniProtKB:Q9DC28, ECO:0000269|PubMed:10606744, ECO:0000269|PubMed:12270943, ECO:0000269|PubMed:14761950, ECO:0000269|PubMed:16027726, ECO:0000269|PubMed:17562708, ECO:0000269|PubMed:17962809, ECO:0000269|PubMed:19043076, ECO:0000269|PubMed:20041275, ECO:0000269|PubMed:20048001, ECO:0000269|PubMed:20407760, ECO:0000269|PubMed:20637175, ECO:0000269|PubMed:20696890, ECO:0000269|PubMed:20699359, ECO:0000269|PubMed:21084295, ECO:0000269|PubMed:21422228, ECO:0000269|PubMed:23636092}.
Molecular Weight:	47.3 kDa
UniProt:	P48730
Pathways:	Hedgehog Signaling, M Phase

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