Datasheet for ABIN7553261

Cyclin D1 Protein (CCND1) (AA 1-295) (His tag)

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Overview

Quantity:	1 mg
Target:	Cyclin D1 (CCND1)
Protein Characteristics:	AA 1-295
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Cyclin D1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant CCND1 Protein expressed in mammalian cells.
Sequence:	MEHQLLCCEV ETIRRAYPDA NLLNDRVLRA MLKAEETCAP SVSYFKCVQK EVLPSMRKIV ATWMLEVCEE QKCEEEVFPL AMNYLDRFLS LEPVKKSRLQ LLGATCMFVA SKMKETIPLT AEKLCIYTDN SIRPEELLQM ELLLVNKLKW NLAAMTPHDF IEHFLSKMPE AEENKQIIRK HAQTFVALCA TDVKFISNPP SMVAAGSVVA AVQGLNLRSP NNFLSYYRLT RFLSRVIKCD PDCLRACQEQ IEALLESSLR QAQQNMDPKA AEEEEEEEEE VDLACTPTDV RDVDI **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:

Product Details

- 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

Target:	Cyclin D1 (CCND1)
Alternative Name:	CCND1 (CCND1 Products)
Background:	G1/S-specific cyclin-D1 (B-cell lymphoma 1 protein) (BCL-1) (BCL-1 oncogene) (PRAD1 oncogene),FUNCTION: Regulatory component of the cyclin D1-CDK4 (DC) complex that phosphorylates and inhibits members of the retinoblastoma (RB) protein family including RB1 and regulates the cell-cycle during G(1)/S transition (PubMed:1833066, PubMed:1827756, PubMed:8114739, PubMed:8302605, PubMed:19412162, PubMed:33854235). Phosphorylation of RB1 allows dissociation of the transcription factor E2F from the RB/E2F complex and the subsequent transcription of E2F target genes which are responsible for the progression through the G(1) phase (PubMed:1833066, PubMed:1827756, PubMed:8114739, PubMed:8302605, PubMed:19412162). Hypophosphorylates RB1 in early G(1) phase (PubMed:1833066, PubMed:1827756, PubMed:8114739, PubMed:8302605, PubMed:19412162). Cyclin D-CDK4 complexes are major integrators of various mitogenenic and antimitogenic signals (PubMed:1833066, PubMed:1827756, PubMed:8302605, PubMed:19412162). Also a substrate for SMAD3, phosphorylating SMAD3 in a cell-cycle-dependent manner and repressing its transcriptional activity (PubMed:15241418). Component

Target Details

	of the ternary complex, cyclin D1/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex (PubMed:9106657). Exhibits transcriptional corepressor activity with INSM1 on the NEUROD1 and INS promoters in a cell cycle-independent manner (PubMed:16569215, PubMed:18417529). {ECO:0000269|PubMed:15241418, ECO:0000269|PubMed:16569215, ECO:0000269|PubMed:1827756, ECO:0000269|PubMed:1833066, ECO:0000269|PubMed:18417529, ECO:0000269|PubMed:19412162, ECO:0000269|PubMed:33854235, ECO:0000269|PubMed:8114739, ECO:0000269|PubMed:8302605, ECO:0000269|PubMed:9106657}.
Molecular Weight:	33.7 kDa
UniProt:	P24385
Pathways:	PI3K-Akt Signaling, Cell Division Cycle, Mitotic G1-G1/S Phases, ER-Nucleus 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.
Expiry Date:	12 months