Datasheet for ABIN7553752

CDT2/RAMP Protein (AA 1-730) (His tag)

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Overview

Quantity:	1 mg
Target:	CDT2/RAMP (DTL)
Protein Characteristics:	AA 1-730
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CDT2/RAMP protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant DTL Protein expressed in mammalian cells.
Sequence:	MLFNSVLRQP QLGVLRNGWS SQYPLQSLLT GYQCSGNDEH TSYGETGVPV PPFGCTFSSA PNMEHVLAVA NEEGFVRLYN TESQSFRKKC FKEWMAHWNA VFDLAWVPGE LKLVTAAGDQ TAKFWDVKAG ELIGTCKGHQ CSLKSVAFSK FEKAVFCTGG RDGNIMVWDT RCNKKDGFYR QVNQISGAHN TSDKQTPSKP KKKQNSKGLA PSVDFQQSVT VVLFQDENTL VSAGAVDGII KVWDLRKNYT AYRQEPIASK SFLYPGSSTR KLGYSSLILD STGSTLFANC TDDNIYMFNM TGLKTSPVAI FNGHQNSTFY VKSSLSPDDQ FLVSGSSDEA AYIWKVSTPW QPPTVLLGHS QEVTSVCWCP SDFTKIATCS DDNTLKIWRL NRGLEEKPGG DKLSTVGWAS QKKKESRPGL VTVTSSQSTP AKAPRAKCNP SNSSPSSAAC APSCAGDLPL PSNTPTFSIK TSPAKARSPI NRRGSVSSVS PKPPSSFKMS IRNWVTRTPS SSPPITPPAS ETKIMSPRKA LIPVSQKSSQ AEACSESRNR VKRRLDSSCL ESVKQKCVKS CNCVTELDGQ VENLHLDLCC LAGNQEDLSK DSLGPTKSSK IEGAGTSISE PPSPISPYAS ESCGTLPLPL RPCGEGSEMV GKENSSPENK NWLLAMAAKR KAENPSPRSP SSQTPNSRRQ SGKKLPSPVT ITPSSMRKIC TYFHRKSQED

Product Details

	FCGPEHSTEL **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: • 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:	CDT2/RAMP (DTL)
Alternative Name:	DTL (DTL Products)
Background:	Denticleless protein homolog (DDB1- and CUL4-associated factor 2) (Lethal(2) denticleless protein homolog) (Retinoic acid-regulated nuclear matrix-associated protein),FUNCTION: Substrate-specific adapter of a DCX (DDB1-CUL4-X-box) E3 ubiquitin-protein ligase complex required for cell cycle control, DNA damage response and translesion DNA synthesis. The DCX(DTL) complex, also named CRL4(CDT2) complex, mediates the polyubiquitination and subsequent degradation of CDT1, CDKN1A/p21(CIP1), FBH1, KMT5A and SDE2 (PubMed:16861906, PubMed:16949367, PubMed:16964240, PubMed:17085480, PubMed:18703516, PubMed:18794347, PubMed:18794348, PubMed:19332548,

Target Details

	PubMed:20129063, PubMed:23478441, PubMed:23478445, PubMed:23677613, PubMed:27906959). CDT1 degradation in response to DNA damage is necessary to ensure proper cell cycle regulation of DNA replication (PubMed:16861906, PubMed:16949367, PubMed:17085480). CDKN1A/p21(CIP1) degradation during S phase or following UV irradiation is essential to control replication licensing (PubMed:18794348, PubMed:19332548). KMT5A degradation is also important for a proper regulation of mechanisms such as TGF-beta signaling, cell cycle progression, DNA repair and cell migration (PubMed:23478445). Most substrates require their interaction with PCNA for their polyubiquitination: substrates interact with PCNA via their PIP-box, and those containing the 'K+4' motif in the PIP box, recruit the DCX(DTL) complex, leading to their degradation. In undamaged proliferating cells, the DCX(DTL) complex also promotes the 'Lys-164' monoubiquitination of PCNA, thereby being involved in PCNA-dependent translesion DNA synthesis (PubMed:20129063, PubMed:23478441, PubMed:23478445, PubMed:23677613). The DDB1-CUL4A-DTL E3 ligase complex regulates the circadian clock function by mediating the ubiquitination and degradation of CRY1 (PubMed:26431207). {ECO:0000269|PubMed:16861906, ECO:0000269|PubMed:16949367, ECO:0000269|PubMed:16964240, ECO:0000269|PubMed:17085480, ECO:0000269|PubMed:18703516, ECO:0000269|PubMed:18794347, ECO:0000269|PubMed:18794348, ECO:0000269|PubMed:19332548, ECO:0000269|PubMed:20129063, ECO:0000269|PubMed:23478441, ECO:0000269|PubMed:23478445, ECO:0000269|PubMed:23677613, ECO:0000269|PubMed:26431207, ECO:0000269|PubMed:27906959}.
Molecular Weight:	79.5 kDa
UniProt:	Q9NZJ0

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

Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months

