

# Datasheet for ABIN7563673 CDT2/RAMP Protein (AA 1-729) (His tag)



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Quantity:	1 mg
Target:	CDT2/RAMP (DTL)
Protein Characteristics:	AA 1-729
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CDT2/RAMP protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details	
Purpose:	Custom-made recombinat Dtl Protein expressed in mammalien cells.
Sequence:	MLFNSVLRQP QLGVLRNGWS SHYPLQSLLS GYQCNCNDEH TSYGETGVPV PPFGCTFCTA
	PSMEHILAVA NEEGFVRLYN TESQTSKKTC FKEWMAHWNA VFDLAWVPGE LKLVTAAGDQ
	TAKFWDVRAG ELMGTCKGHQ CSLKSVAFPK FQKAVFSTGG RDGNIMIWDT RCNKKDGFYR
	QVNQISGAHN TADKQTPSKP KKKQNSKGLA PAVDSQQSVT VVLFQDENTL VSAGAVDGII
	KVWDLRKNYT AYRQEPIASK SFLYPGTSTR KLGYSSLVLD STGSTLFANC TDDNIYMFNM
	TGLKTSPVAV FNGHQNSTFY VKSSLSPDDQ FLISGSSDEA AYIWKVSMPW HPPTVLLGHS
	QEVTSVCWCP SDFTKIATCS DDNTLKIWRL NRGLEEKPGD KHSIVGWTSQ KKKEVKACPV
	TVPSSQSTPA KAPRAKSSPS ISSPSSAACT PSCAGDLPLP SSTPTFSVKT TPATTRSSVS
	RRGSISSVSP KPLSSFKMSL RNWVTRTPSS SPPVTPPASE TKISSPRKAL IPVSQKSSQA
	DACSESRNRV KRRLDSSCLE SVKQKCVKSC NCVTELDGQA ESLRLDLCCL SGTQEVLSQD
	SEGPTKSSKT EGAGTSISEP PSPVSPYASE GCGPLPLPLR PCGEGSEMVG KENSSPENKN

WLLAIAAKRK AENSSPRSPS SQTPSSRRQS GKTSPGPVTI TPSSMRKICT YFRRKTQDDF

CSPEHSTEL 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:

- · 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:	CDT2/RAMP (DTL)
Alternative Name:	Dtl (DTL Products)
Background:	Denticleless protein homolog (Lethal(2) denticleless protein homolog) (Meth A retinoic acid-
	regulated nuclear matrix-associated protein) (Meth A RAMP) (Retinoic acid-regulated nuclear

Denticleless protein homolog (Lethal(2) denticleless protein homolog) (Meth A retinoic acid-regulated nuclear matrix-associated protein) (Meth A RAMP) (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. CDT1 degradation in response to DNA damage is necessary to ensure proper cell cycle regulation of DNA replication. CDKN1A/p21(CIP1) degradation during S phase or following UV irradiation is essential to control replication licensing. KMT5A degradation is

also important for a proper regulation of mechanisms such as TGF-beta signaling, cell cycle progression, DNA repair and cell migration. 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. The DDB1-CUL4A-DTL E3 ligase complex regulates the circadian clock function by mediating the ubiquitination and degradation of CRY1 (By similarity). {ECO:0000250|UniProtKB:Q9NZJ0}.

Molecular Weight:

79.1 kDa

UniProt:

Q3TLR7

## **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