Datasheet for ABIN7553563

Cullin 4A Protein (CUL4A) (AA 1-759) (His tag)

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Overview

Quantity:	1 mg
Target:	Cullin 4A (CUL4A)
Protein Characteristics:	AA 1-759
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Cullin 4A protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant CUL4A Protein expressed in mammalian cells.
Sequence:	MADEAPRKGS FSALVGRTNG LTKPAALAAA PAKPGGAGGS KKLVIKNFRD RPRLPDNYTQ DTWRKLHEAV RAVQSSTSIR YNLEELYQAV ENLCSHKVSP MLYKQLRQAC EDHVQAQILP FREDSLDSVL FLKKINTCWQ DHCRQMIMIR SIFLFLDRTY VLQNSTLPSI WDMGLELFRT HIISDKMVQS KTIDGILLLI ERERSGEAVD RSLLRSLLGM LSDLQVYKDS FELKFLEETN CLYAAEGQRL MQEREVPEYL NHVSKRLEEE GDRVITYLDH STQKPLIACV EKQLLGEHLT AILQKGLDHL LDENRVPDLA QMYQLFSRVR GGQQALLQHW SEYIKTFGTA IVINPEKDKD MVQDLLDFKD KVDHVIEVCF QKNERFVNLM KESFETFINK RPNKPAELIA KHVDSKLRAG NKEATDEELE RTLDKIMILF RFIHGKDVFE AFYKKDLAKR LLVGKSASVD AEKSMLSKLK HECGAAFTSK LEGMFKDMEL SKDIMVHFKQ HMQNQSDSGP IDLTVNILTM GYWPTYTPME VHLTPEMIKL QEVFKAFYLG KHSGRKLQWQ TTLGHAVLKA EFKEGKKEFQ VSLFQTLVLL MFNEGDGFSF EEIKMATGIE DSELRRTLQS LACGKARVLI KSPKGKEVED GDKFIFNGEF KHKLFRIKIN QIQMKETVEE QVSTTERVFQ DRQYQIDAAI VRIMKMRKTL GHNLLVSELY

Product Details

	NQLKFPVKPG DLKKRIESLI DRDYMERDKD NPNQYHYVA **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:	Cullin 4A (CUL4A)
Alternative Name:	CUL4A (CUL4A Products)
Background:	Cullin-4A (CUL-4A),FUNCTION: Core component of multiple cullin-RING-based E3 ubiquitin-protein ligase complexes which mediate the ubiquitination of target proteins (PubMed:14578910, PubMed:15811626, PubMed:15548678, PubMed:15448697, PubMed:14739464, PubMed:16678110, PubMed:17041588, PubMed:24209620, PubMed:30166453, PubMed:33854232, PubMed:33854239). As a scaffold protein may contribute to catalysis through positioning of the substrate and the ubiquitin-conjugating enzyme (PubMed:14578910, PubMed:15811626, PubMed:15548678, PubMed:15448697,

PubMed:14739464, PubMed:16678110, PubMed:17041588, PubMed:24209620). The E3 ubiquitin-protein ligase activity of the complex is dependent on the neddylation of the cullin subunit and is inhibited by the association of the deneddylated cullin subunit with TIP120A/CAND1 (PubMed:14578910, PubMed:15811626, PubMed:15548678, PubMed:15448697, PubMed:14739464, PubMed:16678110, PubMed:17041588, PubMed:24209620). The functional specificity of the E3 ubiquitin-protein ligase complex depends on the variable substrate recognition component (PubMed:14578910, PubMed:15811626, PubMed:15548678, PubMed:15448697, PubMed:14739464, PubMed:16678110, PubMed:17041588, PubMed:24209620). DCX(DET1-COP1) directs ubiquitination of JUN (PubMed:14739464). DCX(DDB2) directs ubiquitination of XPC (PubMed:15811626). DCX(DDB2) ubiquitinates histones H3-H4 and is required for efficient histone deposition during replication-coupled (H3.1) and replication-independent (H3.3) nucleosome assembly, probably by facilitating the transfer of H3 from ASF1A/ASF1B to other chaperones involved in histone deposition (PubMed:16678110, PubMed:17041588, PubMed:24209620). DCX(DTL) plays a role in PCNA-dependent polyubiquitination of CDT1 and MDM2-dependent ubiquitination of p53/TP53 in response to radiation-induced DNA damage and during DNA replication (PubMed:14578910, PubMed:15548678, PubMed:15448697). DCX(DTL) directs autoubiquitination of DTL (PubMed:23478445). In association with DDB1 and SKP2 probably is involved in ubiquitination of CDKN1B/p27kip (PubMed:16537899). Is involved in ubiquitination of HOXA9 (PubMed:14609952). The DDB1-CUL4A-DTL E3 ligase complex regulates the circadian clock function by mediating the ubiquitination and degradation of CRY1 (PubMed:26431207). A number of DCX complexes (containing either TRPC4AP or DCAF12 as substrate-recognition component) are part of the DesCEND (destruction via C-end degrons) pathway, which recognizes a C-degron located at the extreme C terminus of target proteins, leading to their ubiquitination and degradation (PubMed:29779948). The DCX(AMBRA1) complex is a master regulator of the transition from G1 to S cell phase by mediating ubiquitination of phosphorylated cyclin-D (CCND1, CCND2 and CCND3) (PubMed:33854232, PubMed:33854239). The DCX(AMBRA1) complex also acts as a regulator of Cul5-RING (CRL5) E3 ubiquitin-protein ligase complexes by mediating ubiquitination and degradation of Elongin-C (ELOC) component of CRL5 complexes (PubMed:30166453). With CUL4B, contributes to ribosome biogenesis (PubMed:26711351). {ECO:0000269|PubMed:14578910, ECO:0000269|PubMed:14609952, ECO:0000269|PubMed:14739464, ECO:0000269|PubMed:15448697, ECO:0000269|PubMed:15548678, ECO:0000269|PubMed:15811626, ECO:0000269|PubMed:16537899, ECO:0000269|PubMed:16678110, ECO:0000269|PubMed:17041588, ECO:0000269|PubMed:23478445, ECO:0000269|PubMed:24209620,

Target Details

	ECO:0000269|PubMed:26431207, ECO:0000269|PubMed:26711351, ECO:0000269|PubMed:29779948, ECO:0000269|PubMed:30166453, ECO:0000269|PubMed:33854232, ECO:0000269|PubMed:33854239}.
Molecular Weight:	87.7 kDa
UniProt:	Q13619

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

