Datasheet for ABIN7553611

Cullin 2 Protein (CUL2) (AA 1-745) (His tag)

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Overview

Quantity:	1 mg
Target:	Cullin 2 (CUL2)
Protein Characteristics:	AA 1-745
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Cullin 2 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant CUL2 Protein expressed in mammalian cells.
Sequence:	MSLKPRVVDF DETWNKLLTT IKAVVMLEYV ERATWNDRFS DIYALCVAYP EPLGERLYTE TKIFLENHVR HLHKRVLESE EQVLVMYHRY WEEYSKGADY MDCLYRYLNT QFIKKNKLTE ADLQYGYGGV DMNEPLMEIG ELALDMWRKL MVEPLQAILI RMLLREIKND RGGEDPNQKV IHGVINSFVH VEQYKKKFPL KFYQEIFESP FLTETGEYYK QEASNLLQES NCSQYMEKVL GRLKDEEIRC RKYLHPSSYT KVIHECQQRM VADHLQFLHA ECHNIIRQEK KNDMANMYVL LRAVSTGLPH MIQELQNHIH DEGLRATSNL TQENMPTLFV ESVLEVHGKF VQLINTVLNG DQHFMSALDK ALTSVVNYRE PKSVCKAPEL LAKYCDNLLK KSAKGMTENE VEDRLTSFIT VFKYIDDKDV FQKFYARMLA KRLIHGLSMS MDSEEAMINK LKQACGYEFT SKLHRMYTDM SVSADLNNKF NNFIKNQDTV IDLGISFQIY VLQAGAWPLT QAPSSTFAIP QELEKSVQMF ELFYSQHFSG RKLTWLHYLC TGEVKMNYLG KPYVAMVTTY QMAVLLAFNN SETVSYKELQ DSTQMNEKEL TKTIKSLLDV KMINHDSEKE DIDAESSFSL NMNFSSKRTK FKITTSMQKD TPQEMEQTRS AVDEDRKMYL QAAIVRIMKA RKVLRHNALI QEVISQSRAR FNPSISMIKK

Product Details

	CIEVLIDKQY IERSQASADE YSYVA **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 2 (CUL2)
Alternative Name:	CUL2 (CUL2 Products)
Background:	Cullin-2 (CUL-2),FUNCTION: Core component of multiple cullin-RING-based ECS (ElonginB/C-CUL2/5-SOCS-box protein) E3 ubiquitin-protein ligase complexes, which mediate the ubiquitination of target proteins (PubMed:11384984, PubMed:26138980, PubMed:29779948, PubMed:29775578). CUL2 may serve as a rigid scaffold in the complex and may contribute to catalysis through positioning of the substrate and the ubiquitin-conjugating enzyme (PubMed:9122164, PubMed:10973499, PubMed:11384984, PubMed:12609982, PubMed:24076655). 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

Target Details

	subunit with TIP120A/CAND1 (PubMed:12609982, PubMed:24076655, PubMed:27565346). The functional specificity of the ECS complex depends on the substrate recognition component (PubMed:9122164, PubMed:10973499, PubMed:26138980, PubMed:29779948, PubMed:29775578). ECS(VHL) mediates the ubiquitination of hypoxia-inducible factor (HIF) (PubMed:9122164, PubMed:10973499). A number of ECS complexes (containing either KLHDC2, KLHDC3, KLHDC10, APPBP2, FEM1A, FEM1B or FEM1C 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:26138980, PubMed:29779948, PubMed:29775578). ECS complexes and ARIH1 collaborate in tandem to mediate ubiquitination of target proteins (PubMed:27565346). ECS(LRR1) ubiquitinates MCM7 and promotes CMG replisome disassembly by VCP and chromatin extraction during S-phase (By similarity). {ECO:0000250|UniProtKB:Q9D4H8, ECO:0000269|PubMed:10973499, ECO:0000269|PubMed:11384984, ECO:0000269|PubMed:12609982, ECO:0000269|PubMed:24076655, ECO:0000269|PubMed:26138980, ECO:0000269|PubMed:27565346, ECO:0000269|PubMed:29775578, ECO:0000269|PubMed:29779948, ECO:0000269|PubMed:9122164}.
Molecular Weight:	87.0 kDa
UniProt:	Q13617
Pathways:	M Phase, Asymmetric Protein Localization, SARS-CoV-2 Protein Interactome

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.

Handling

Expiry Date:	12 months