Datasheet for ABIN3137093

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

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1 Image

Overview

Quantity:	1 mg
Target:	Cullin 2 (CUL2)
Protein Characteristics:	AA 1-745
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Cullin 2 protein is labelled with His tag.
Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS), Crystallization (Crys)

Product Details

Sequence:	MSLKPRVVDF DETWNKLLTT IKAVVMLEYV ERATWNDRFS DIYALCVAYP EPLGERLYAE TKIFLESHVR HLYKRVLESE EQVLVMYHRY WEEYSKGADY MDCLYRYLNT QYIKKNKLTE ADIQYGYGGV DMNEPLMEIG ELALDMWRKL MVEPLQNILI RMLLREIKND RGGEDPNQKV IHGVINSFVH VEQYKKKFPL KFYQGIFVSP FLTETGEYYK QEASNLLQES NCSQYMEKVL GRLKDEEIRC RKYLHPSSYT KVIHECQQRM VADHLQFLHS ECHSIIQQER KNDMANMYVL LRAVSSGLPH MIEELQKHIH DEGLRATSNL TQEHMPTLFV ESVLEVHGKF VQLINTVLNG DQHFMSALDK ALTSVVNYRE PKSVCKAPEL LAKYCDNLLK KSAKGMTENE VEDKLTSFIT VFKYIDDKDV FQKFYARMLA KRLIHGLSMS MDSEEAMINK LKQACGYEFT SKLHRMYTDM SVSADLNNKF NNFIRNQDTV IDLGISFQIY VLQAGAWPLT QAPSSTFAIP QELEKSVQMF ELFYSQHFSG RKLTWLHYLC TGEVKMNYLG KPYVAMVTTY QMAVLLAFNN SETVSYKELQ DSTQMNEKEL TKTIKSLLDV KMINHDSEKE DIDAESSFSL NMSFSSKRTK FKITTSMQKD TPQELEQTRS AVDEDRKMYL QAAIVRIMKA RKVLRHNALI QEVISQSRAR FNPSISMIKK

	CIEVLIDKQY IERSQASADE YSYVA **Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**
Characteristics:	• Made in Germany - from design to production - by highly experienced protein experts. • Mouse Cul2 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade. • 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 will ensure that you receive a correctly folded protein. 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. In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization). When you order this made-to-order protein you will only pay upon receival of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered. The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer. The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.
Purification:	Two step purification of proteins expressed in baculovirus infected SF9 insect cells: 1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE. 2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.

Product Details

Grade:	Crystallography grade

Target Details

Target:	Cullin 2 (CUL2)
Alternative Name:	Cul2 (CUL2 Products)
Background:	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. May serve as a rigid scaffold in the complex and may contribute to catalysis through positioning of the substrate and the ubiquitin-conjugating enzyme. 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 (By similarity). The functional specificity of the ECS complex depends on the substrate recognition component. ECS(VHL) mediates the ubiquitination of hypoxia-inducible factor (HIF) (By similarity). {ECO:0000250}.
Molecular Weight:	87.8 kDa Including tag.
UniProt:	Q9D4H8
Pathways:	M Phase, Asymmetric Protein Localization, SARS-CoV-2 Protein Interactome

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 gurantee though.
Comment:	Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value 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:	Unlimited (if stored properly)

Images

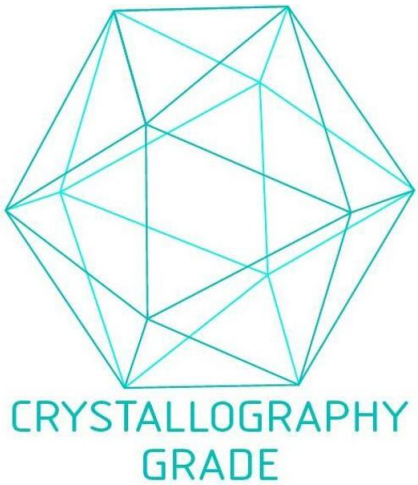

Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process