Datasheet for ABIN3093491

KLHL20 Protein (AA 1-609) (His tag)

1 Image

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Overview

Quantity:	1 mg
Target:	KLHL20
Protein Characteristics:	AA 1-609
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This KLHL20 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	MEGKPMRRCT NIRPGETGMD VTSRCTLGDP NKLPEGVPQP ARMPYISDKH PRQTLEVINL LRKHRELCDV VLVVGAKKIY AHRVILSACS PYFRAMFTGE LAESRQTEVV IRDIDERAME LLIDFAYTSQ ITVEEGNVQT LLPAACLLQL AEIQEACCEF LKRQLDPSNC LGIRAFADTH SCRELLRIAD KFTQHNFQEV MESEEFMLLP ANQLIDIISS DELNVRSEEQ VFNAVMAWVK YSIQERRPQL PQVLQHVRLP LLSPKFLVGT VGSDPLIKSD EECRDLVDEA KNYLLLPQER PLMQGPRTRP RKPIRCGEVL FAVGGWCSGD AISSVERYDP QTNEWRMVAS MSKRRCGVGV SVLDDLLYAV GGHDGSSYLN SVERYDPKTN QWSSDVAPTS TCRTSVGVAV LGGFLYAVGG QDGVSCLNIV ERYDPKENKW TRVASMSTRR LGVAVAVLGG FLYAVGGSDG TSPLNTVERY NPQENRWHTI APMGTRRKHL GCAVYQDMIY AVGGRDDTTE LSSAERYNPR TNQWSPVVAM TSRRSGVGLA VVNGQLMAVG GFDGTTYLKT IEVFDPDANT WRLYGGMNYR RLGGGVGVIK MTHCESHIW **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. • Human KLHL20 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.
Grade:	Crystallography grade

Target Details

Target:	KLHL20
Alternative Name:	KLHL20 (KLHL20 Products)
Background:	Substrate-specific adapter of a BCR (BTB-CUL3-RBX1) E3 ubiquitin-protein ligase complex involved in interferon response and anterograde Golgi to endosome transport. The BCR(KLHL20) E3 ubiquitin ligase complex mediates the ubiquitination of DAPK1, leading to its degradation by the proteasome, thereby acting as a negative regulator of apoptosis (PubMed:20389280). The BCR(KLHL20) E3 ubiquitin ligase complex also specifically mediates 'Lys-33'-linked ubiquitination (PubMed:24768539). Involved in anterograde Golgi to endosome transport by mediating 'Lys-33'-linked ubiquitination of CORO7, promoting interaction between CORO7 and EPS15, thereby facilitating actin polymerization and post-Golgi trafficking (PubMed:24768539). Also acts as a regulator of endothelial migration during angiogenesis by controlling the activation of Rho GTPases. The BCR(KLHL20) E3 ubiquitin ligase complex acts as a regulator of neurite outgrowth by mediating ubiquitination and degradation of PDZ-RhoGEF/ARHGEF11 (PubMed:21670212). In case of tumor, the BCR(KLHL20) E3 ubiquitin ligase complex is involved in tumor hypoxia: following hypoxia, the BCR(KLHL20)complex mediates ubiquitination and degradation of PML, potentiating HIF-1 signaling and cancer progression (PubMed:21840486). {ECO:0000269|PubMed:14528312, ECO:0000269|PubMed:17395875, ECO:0000269|PubMed:20389280, ECO:0000269|PubMed:21670212, ECO:0000269|PubMed:21840486, ECO:0000269|PubMed:24768539}.
Molecular Weight:	68.9 kDa Including tag.
UniProt:	Q9Y2M5

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:	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 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