Datasheet for ABIN3093466

KLHL2 Protein (AA 1-593) (Strep Tag)

1 Image

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Overview

Quantity:	1 mg
Target:	KLHL2
Protein Characteristics:	AA 1-593
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This KLHL2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	METPPLPPAC TKQGHQKPLD SKDDNTEKHC PVTVNPWHMK KAFKVMNELR SQNLLCDVTI VAEDMEISAH RVVLAACSPY FHAMFTGEMS ESRAKRVRIK EVDGWTLRML IDYVYTAEIQ VTEENVQVLL PAAGLLQLQD VKKTCCEFLE SQLHPVNCLG IRAFADMHAC TDLLNKANTY AEQHFADVVL SEEFLNLGIE QVCSLISSDK LTISSEEKVF EAVIAWVNHD KDVRQEFMAR LMEHVRLPLL PREYLVQRVE EEALVKNSSA CKDYLIEAMK YHLLPTEQRI LMKSVRTRLR TPMNLPKLMV VVGGQAPKAI RSVECYDFKE ERWHQVAELP SRRCRAGMVY MAGLVFAVGG FNGSLRVRTV DSYDPVKDQW TSVANMRDRR STLGAAVLNG LLYAVGGFDG STGLSSVEAY NIKSNEWFHV APMNTRRSSV GVGVVGGLLY AVGGYDGASR QCLSTVECYN ATTNEWTYIA EMSTRRSGAG VGVLNNLLYA VGGHDGPLVR KSVEVYDPTT NAWRQVADMN MCRRNAGVCA VNGLLYVVGG DDGSCNLASV EYYNPTTDKW TVVSSCMSTG RSYAGVTVID KPL **Sequence without tag. The proposed Strep-Tag is based on experience s 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 in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified by multi-step, protein-specific process to ensure correct folding and modification.
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- 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.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:

Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®):

1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE.

Product Details

	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:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

Target Details

Target:	KLHL2
Alternative Name:	KLHL2 (KLHL2 Products)
Background:	Kelch-like protein 2 (Actin-binding protein Mayven),FUNCTION: Substrate-specific adapter of a BCR (BTB-CUL3-RBX1) E3 ubiquitin ligase complex that mediates the ubiquitination of target proteins, such as NPTXR, WNK1, WNK3 and WNK4, leading most often to their proteasomal degradation (PubMed:23838290). The BCR(KLHL2) complex catalyzes ubiquitination and degradation of NPTXR (By similarity). Responsible for degradative ubiquitination of the WNK kinases WNK1, WNK3 and WNK4 (PubMed:23838290). Plays a role in the reorganization of the actin cytoskeleton (PubMed:10397770). Promotes growth of cell projections in oligodendrocyte precursors (PubMed:15715669). {ECO:0000250|UniProtKB:Q8JZP3, ECO:0000269|PubMed:10397770, ECO:0000269|PubMed:15715669, ECO:0000269|PubMed:23838290}.
Molecular Weight:	66.0 kDa
UniProt:	O95198

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.
Comment:	ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications. During lysate production, the cell wall and other cellular components that are not required for

Application Details

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Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.
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