Datasheet for ABIN3136331

KLHL12 Protein (AA 1-568) (Strep Tag)

Go to Product page

Overview

Quantity:	250 µg
Target:	KLHL12
Protein Characteristics:	AA 1-568
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This KLHL12 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MGGIMAPKDI MTNTHAKSIL NSMNSLRKSN TLCDVTLRVE QKDFPAHRIV LAACSDYFCA MFTSELSEKG KPYVDIQGLT AATMEILLDF VYTETVHVTV ENVQELLPAA CLLQLKGVKQ ACCEFLESQL DPSNCLGIRD FAETHNCVDL MQAAEVFSQK HFPEVVQHEE FILLSQGEVE KLIKCDEIQV DSEEPVFEAV INWVKHAKKE REESLPDLLQ YVRMPLLTPR YITDVIDAEP FIRCSLQCRD LVDEAKKFHL RPELRSQMQG PRTRARLGAN EVLLVVGGFG SQQSPIDVVE KYDPKTQEWS FLPSITRKRR YVASVSLHDR IYVIGGYDGR SRLSSVECLD YTADEDGVWY SVAPMNVRRG LAGATTLGDM IYVSGGFDGS RRHTSMERYD PNIDQWSMLG DMQTAREGAG LVVASGIIYC LGGYDGLNIL NSVEKYDPHT GHWTNVTPMA TKRSGAGVAL LNDHIYVVGG FDGTAHLSSV EAYNIRTDSW TTVTSMTTPR CYVGATVLRG RLYAIAGYDG NSLLSSIECY DPIIDSWEVV ASMGTQRCDA GVCVLREK
	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 in one-step affinity chromatography • 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 try to ensure that you receive soluble 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 against its specific reference buffer. • We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.
Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	KLHL12
Alternative Name:	Klhl12 (KLHL12 Products)
Background:	Kelch-like protein 12 (CUL3-interacting protein 1),FUNCTION: Substrate-specific adapter of a BCR (BTB-CUL3-RBX1) E3 ubiquitin ligase complex that acts as a negative regulator of Wnt signaling pathway and ER-Golgi transport. The BCR(KLHL12) complex is involved in ER-Golgi transport by regulating the size of COPII coats, thereby playing a key role in collagen export, which is required for embryonic stem (ES) cells division: BCR(KLHL12) acts by mediating monoubiquitination of SEC31 (SEC31A or SEC31B). The BCR(KLHL12) complex is also involved in neural crest specification: in response to cytosolic calcium increase, interacts with the heterodimer formed with PEF1 and PDCD6/ALG-2, leading to bridge together the BCR(KLHL12) complex and SEC31 (SEC31A or SEC31B), promoting monoubiquitination of SEC31 and subsequent collagen export. As part of the BCR(KLHL12) complex, also acts as a negative regulator of the Wnt signaling pathway by mediating ubiquitination and subsequent proteolysis of DVL3. The BCR(KLHL12) complex also mediates polyubiquitination of DRD4 and PEF1, without leading to degradation of these proteins. {ECO:0000250|UniProtKB:Q53G59}.
Molecular Weight:	63.2 kDa
UniProt:	Q8BZM0

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 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!
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months