

Datasheet for ABIN7554291

KLHL12 Protein (AA 1-568) (His tag)



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Overview

Quantity:	1 mg
Target:	KLHL12
Protein Characteristics:	AA 1-568
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This KLHL12 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat KLHL12 Protein expressed in mammalian cells.
Sequence:	<p>MGGIMAPKDI MTNTHAKSIL NSMNSLRKSN TLCDVTLRVE QKDFPAHRIV LAACSDYFCA</p> <p>MFTSESEKG KPYVDIQLT ASTMEILLDF VYTETVHVTV ENVQELLPAAL CLLQLKGVKQ</p> <p>ACCEFLESQ L DPSNCLGIRD FAETHNCVDL MQAAEVFSQK HFPEVVQHEE FILLSQGEVE</p> <p>KLIKCDEIQV DSEEPVFEAV INWVKHAKKE REESLPNLLQ YVRMPLLTTPR YITDVIDAEP</p> <p>FIRCSLQCRD LVDEAKKFHL RPELRSQMQG PRTRARLGAN EVLLVVGFG SQQSPIDVVE</p> <p>KYDPKTQEWS FLPSITRKR YVASVSLHDR IYVIGGYDGR SRLSSVECLD YTADEDGVWY</p> <p>SVAPMNVRRG LAGATTLGDM IYVSGGFDGS RRHTSMERYD PNIDQWSMLG DMQTAREGAG</p> <p>LVVASGVIYC LGGYDGLNIL NSVEKYDPHT GHWTNVTPMA TKRSGAGVAL LNDHIYVVG</p> <p>FDGTAHLSSV EAYNIRTD SW TTVTSM TTPR CYVGATVLRG RLYAIAGYDG NSLLSSIECY</p> <p>DPIIDSWEVV TSMGTQRCD GVCVLREK Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the</p>

protein could make another tag necessary. In case you have a special request, please contact us.

Characteristics:	<p>Key Benefits:</p> <ul style="list-style-type: none">• 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). <p>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.</p> <p>If you are not interested in a full length protein, please contact us for individual protein fragments.</p> <p>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.</p>
Purity:	> 90 % as determined by Bis-Tris Page, Western Blot
Grade:	custom-made

Target Details

Target:	KLHL12
Alternative Name:	KLHL12 (KLHL12 Products)
Background:	<p>Kelch-like protein 12 (CUL3-interacting protein 1) (DKIR homolog) (hDKIR),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 (PubMed:22358839, PubMed:27565346). 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) (PubMed:22358839, PubMed:27565346). 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 (PubMed:27716508). As part of the BCR(KLHL12)</p>

Target Details

complex, also acts as a negative regulator of the Wnt signaling pathway by mediating ubiquitination and subsequent proteolysis of DVL3 (PubMed:16547521). The BCR(KLHL12) complex also mediates polyubiquitination of DRD4 and PEF1, without leading to degradation of these proteins (PubMed:18303015, PubMed:20100572, PubMed:27716508).
{ECO:0000269|PubMed:16547521, ECO:0000269|PubMed:18303015, ECO:0000269|PubMed:20100572, ECO:0000269|PubMed:22358839, ECO:0000269|PubMed:27565346, ECO:0000269|PubMed:27716508}.

Molecular Weight: 63.3 kDa

UniProt: [Q53G59](#)

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.

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.

Expiry Date: 12 months