

Datasheet for ABIN3131624

Axin Protein (AA 1-863) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	Axin (AXIN1)
Protein Characteristics:	AA 1-863
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This Axin protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	<p>MNVQEQQGFPL DLGASFTEDA PRPPVPGEEG ELVSTDSPRV NHSFCSGKGT SIKSETSTAT</p> <p>PRRSDLDLGY EPEGSASPTP PYLRWAESLH SLLDDQDGIS LFRTFLKQEG CADLLDFWFA</p> <p>CSGFRKLEPC DSNEEKRLKL ARAIRKYIL DSNIVSRQT KPATKSFID CVMKQQIDPA</p> <p>MFDQAAQTEIQ STMEENTYPS FLKSDIYLEY TRTGSESPKV CSDQSSSGSGT GKGMSGYLPT</p> <p>LNEDEEWKCD QDADEDDGRD PLPPSRLTQK LLETAAPRA PSSRRYNEGR ELRYGSWREP</p> <p>VNPYYVNSGY ALAPATSAND SEQQSLSSDA DTLSTLDSSV DGIPPYRIRK QHRREMQESI</p> <p>QVNGRVPLPH IPRTYRMPKE IRVEPQKFAE ELIHRLEAVQ RTREAEEKLE ERLKVRMEE</p> <p>EGEDGEMPSG PMASHKLPSV PAWHHFPPRY VDMGCSGLRD AHEENPESIL DEHVQRMRT</p> <p>PGCQSPGPGH RSPDSGHVAK TAVLGGTASG HGKHVPKLGL KLDTAGLHHH RHVHHHVHHN</p> <p>SARPKEQMEA EVARRVQSSF SWGPETHGHA KPRSYSENAG TTLSAGDLAF GKGTSAPSKR</p> <p>NTKKAESGKN ANAEVPSTTE DAEKNQKIMQ WIEGEKEIS RHRKAGHGSS GLRKQQAHE</p>

SRPLSIERPG AVHPWVSAQL RNSVQPSHLF IQDPTMPPNP APNPLTQLEE ARRRLEEEEEK
RANKLPSKQR YVQAVMQRGR TCVRPACAPV LSVVPAVSDL ELSETETKSQ RKAGGGSAPP
CDSIVVAYYF CGEPIPYRTL VRGRAVTLGQ FKELLTKKGS YRYYFKKVSD EFDCGVVFEE
VREDEAVLPV FEEKIIGKVE KVD

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.

Product Details

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).
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Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
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Grade:	custom-made
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Target Details

Target:	Axin (AXIN1)
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Alternative Name:	Axin1 (AXIN1 Products)
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Background:	Axin-1 (Axis inhibition protein 1) (Protein Fused),FUNCTION: Component of the beta-catenin destruction complex required for regulating CTNNB1 levels through phosphorylation and ubiquitination, and modulating Wnt-signaling (By similarity). Controls dorsoventral patterning via two opposing effects, down-regulates CTNNB1 to inhibit the Wnt signaling pathway and ventralize embryos, but also dorsalizes embryos by activating a Wnt-independent JNK signaling pathway. In Wnt signaling, probably facilitates the phosphorylation of CTNNB1 and APC by GSK3B. Likely to function as a tumor suppressor. Facilitates the phosphorylation of TP53 by HIPK2 upon ultraviolet irradiation. Enhances TGF-beta signaling by recruiting the RNF111 E3 ubiquitin ligase and promoting the degradation of inhibitory SMAD7 (By similarity). Also a component of the AXIN1-HIPK2-TP53 complex which controls cell growth, apoptosis and development. {ECO:0000250 UniProtKB:O15169, ECO:0000269 PubMed:12223491, ECO:0000269 PubMed:15526030, ECO:0000269 PubMed:17681137}.
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Molecular Weight:	96.3 kDa
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UniProt:	O35625
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Pathways:	WNT Signaling, Sensory Perception of Sound, Regulation of G-Protein Coupled Receptor Protein Signaling
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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.
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Comment:	ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> 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
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Application Details

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