

Datasheet for ABIN3089813

AUTS2 Protein (AA 1-1259) (Strep Tag)



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1 Image

Overview

Quantity:	1 mg
Target:	AUTS2
Protein Characteristics:	AA 1-1259
Origin:	Human
Source:	Tobacco (<i>Nicotiana tabacum</i>)
Protein Type:	Recombinant
Purification tag / Conjugate:	This AUTS2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	<p>MDGPTRGHGL RKKRRRSQR DRERRSRGGL GAGAAGGGGA GRTRALSLAS SSGSDKEDNG KPPSSAPSRP RPPRRKRRES TSAEEDIIDG FAMTSFVTFE ALEKDVALKP QERVEKRQTP LTKKKREALT NGLSFHSHKKS RLSHPHHYSS DRENDRNLCQ HLGKRKKMPK ALRQLKPGQN SCRDSSESA SGESKGFHRS SSRERLSDSS APSSLGTGYF CDSDSQEEK ASDASSEKLF NTVIVNKDPE LGVGTLPEDH SQDAGPIVPK ISGLERSQEK SQDCCKEPIF EPVVLKDPKP QVAQPIQPQ TEPQLRAPSP DPDLVQRTEA PPQPPPLSTQ PPQGPPEAQL QPAPQPQVQR PPRPQSPTQL LHQNLPPVQA HPSAQLSQP LSAYNSSLS LNSLSSSRSS TPAKTQPAPP HISHHPSASP FPLSLPNHSP LHSFTPTLQP PAHSHHPNMF APPTALPPPP PLTSGSLQVA GHPAGSTYSE QDILRQELNT RFLASQSADR GASLGPPPYL RTEFHQHQHQ HQTHTQHTHQ HTFTPFPHAI PPTAIMPTPA PPMFDKYPTK VDPFYRHSFL HSYPPAVSGI PPMIPPTGPF GSLQGAFQPK TSNPIDVAAR PGTVPHTLLQ KDPRLTDPFR PMLRKPGKWC AMHVHIAWQI YHHQQKVKKQ MQSDPHKLDL GLKPEFLSRP PGPSLFGAIH HPHDLARPST LFSAAAGAAHP</p>
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TGTPFGPPPH HSNFLNPAAH LEPFNRPFSTF TGLAAVGGNA FGGLGNPSVT PNSMFGHKDG
PSVQNFNSNP EPWNLHRTP PSFPTPPWL KPGELERSAS AAAHDRDRDV DKRDSSVSKD
DKERESVEKR HSSHPSAPV LPVNALGHTR SSTEQIR AHL NTEAREKDKP KERERDHSES
RKDLAADEHK AKEGHLPEKD GHGHEGRAAG EEAQQLARVP SPYVRTPVVE SARNSTSSR
EAEPKGEPA YENPKKSSEV KVKEERKEDH DLPPEAPQTH RASEPPPPNS SSSVHPGPLA
SMPMTVGVTG IHPMNSISL DRTRMMTPFM GISPLPGER FPYPSFHWDIP IRDPLRDPYR
ELDIHRRDPL GRDFLLRNDP LHRLSTPRLY EADRSFRDRE PHDYSHHHHH HHHPLSVDPR
REHERGGHLD ERERLHMLRE DYEHTRLHSV HPASLDGHLP HPSLITPGLP SMHYPRISPT
AGNQNGLLNK TPPTAALSAP PPLISTLGGR PVSPRRTTPL SAEIRERPPS HTLKDIEAR

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!

Product Details

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.
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:

AUTS2

Alternative Name:

AUTS2 ([AUTS2 Products](#))

Background:

Autism susceptibility gene 2 protein,FUNCTION: Component of a Polycomb group (PcG) multiprotein PRC1-like complex, a complex class required to maintain the transcriptionally repressive state of many genes, including Hox genes, throughout development. PcG PRC1 complex acts via chromatin remodeling and modification of histones, it mediates monoubiquitination of histone H2A 'Lys-119', rendering chromatin heritably changed in its expressibility (PubMed:25519132). The PRC1-like complex that contains PCGF5, RNF2, CSNK2B, RYBP and AUTS2 has decreased histone H2A ubiquitination activity, due to the phosphorylation of RNF2 by CSNK2B (PubMed:25519132). As a consequence, the complex mediates transcriptional activation (PubMed:25519132). In the cytoplasm, plays a role in axon and dendrite elongation and in neuronal migration during embryonic brain development. Promotes reorganization of the actin cytoskeleton, lamellipodia formation and neurite elongation via its interaction with RAC guanine nucleotide exchange factors, which then leads to the activation of RAC1 (By similarity). {ECO:0000250|UniProtKB:A0A087WPF7,

Target Details

ECO:0000269|PubMed:25519132}.

Molecular Weight: 139.0 kDa

UniProt: [Q8WXX7](#)

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. 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)



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process