

Datasheet for ABIN3095743

STOX1 Protein (AA 1-989) (Strep Tag)



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1 Image

Overview

Quantity:	1 mg
Target:	STOX1
Protein Characteristics:	AA 1-989
Origin:	Human
Source:	Tobacco (<i>Nicotiana tabacum</i>)
Protein Type:	Recombinant
Purification tag / Conjugate:	This STOX1 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence: MARPVQLAPG SLALVLCRLE AQKAAGAAEE PGGRAVFRFRRANARCFWN ARLARAASRL
AFQGWLRRGV LLVRAPPAQLQLRDAWRRR ALRPPRGFRI RAVGDVFPVQ MNPITQSQFV
PLGEVLCCAI SDMNTAQIVV TQESLLERLM KHYPGIAIPS EDILYTTLTGT LIKERKIYHT
GEGYFIVTPQ TYFITNTTTQ ENKRMLPSDE SRLMPASMTY LVSMESCAES AQENAAPISH
CQSCQCFRDM HTQDVQEAPV AAEVTRKSHR GLGESVSWVQ NGAVSVSAEH HICESTKPLP
YTRDKEKGKK FGFSLLRSL SRKEKPKTEH SSFSAQFPPE EWPVRDEDDL DNIPRDVEHE
IIKRINPILT VDNLIKHTVL MQKYEEQKKY NSQGTSTDML TIGHKYPske GVKKRQGLSA
KPOGQGHsRR DRHKARNQGS EFQPGSIRLE KHPKLPATQP IPRIKSPNEM VGQKPLGEIT
TVLGSLLIYK KRISNPFQGL SHRGSTISK HKIQKTSDLK PSQTGPKEKP FQKPRSLDSS
RIFDGKAKEP YAEQPNDKME AESIYINDPT VKPINDDFRG HLFShPQQSM LQNDGKCCPF
MESMLRYEVY GGENEVIPEV LRKSHSHFDK LGETKQTPHS LPSRGASFSD RTPSACRLVD
NTIHQFQNLG LLDYPVGVNP LRQAARQDKD SEELLRKGfV QDAETTSLEN EQLSNDQAL

YQNEVEDDDG ACSSLYLEED DISENDDLRLQ MLPGHSQYSF TGGSQGNHLG KQKVIERSLT
EYNSTMERVE SQVLKRNECY KPTGLHATPG ESQEPNLSAE SCGLNSGAQF GFNYEEEPSV
AKCVQASAPA DERIFDYSA RKASFEAEVI QDTIGDTGKK PASWSQSPQN QEMRKHFPQK
FQLFNTSHMP VLAQDVQYEH SHLEGTENHS MAGDSGIDSP RTQSLGSNNS VILDGLKRRQ
NFLQNVEGTK SSQPLTSNSL LPLTPVINV

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

Product Details

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®): <ol style="list-style-type: none">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:	STOX1
Alternative Name:	STOX1 (STOX1 Products)
Background:	Storkhead-box protein 1 (Winged-helix domain-containing protein),FUNCTION: Involved in regulating the levels of reactive oxidative species and reactive nitrogen species and in mitochondrial homeostasis in the placenta (PubMed:24738702). Required for regulation of inner ear epithelial cell proliferation via the AKT signaling pathway (By similarity). {ECO:0000250 UniProtKB:B2RQL2, ECO:0000269 PubMed:24738702}., FUNCTION: [Isoform A]: Involved in cell cycle regulation by binding to the CCNB1 promoter, up-regulating its expression and promoting mitotic entry (PubMed:22253775). Induces phosphorylation of MAPT/tau (PubMed:22995177). {ECO:0000269 PubMed:22253775, ECO:0000269 PubMed:22995177}.
Molecular Weight:	111.0 kDa
UniProt:	Q6ZVD7

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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Application Details

Comment:	<p>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 modifications.</p> <p>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!</p>
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