antibodies

Datasheet for ABIN3099933 STARD3 Protein (AA 1-445) (Strep Tag)





Overview

| Quantity: | 1 mg |
|-------------------------------|---|
| Target: | STARD3 |
| Protein Characteristics: | AA 1-445 |
| Origin: | Human |
| Source: | Tobacco (Nicotiana tabacum) |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This STARD3 protein is labelled with Strep Tag. |
| Application: | ELISA, Western Blotting (WB), SDS-PAGE (SDS) |

Product Details

| | Kau Danafita |
|-----------|---|
| | have a special request, please contact us. |
| | system, a different complexity of the protein could make another tag necessary. In case you |
| | Sequence without tag. The proposed Strep-Tag is based on experience s with the expression |
| | QSLAATMFEF AFHLRQRISE LGARA |
| | LSSGIATSHS AKPPTHKYVR GENGPGGFIV LKSASNPRVC TFVWILNTDL KGRLPRYLIH |
| | ILQPERMVLW NKTVTACQIL QRVEDNTLIS YDVSAGAAGG VVSPRDFVNV RRIERRRDRY |
| | QGKEATAVVD QILAQEENWK FEKNNEYGDT VYTIEVPFHG KTFILKTFLP CPAELVYQEV |
| | ERWYLAAQVA VARGPLLFSG ALSEGQFYSP PESFAGSDNE SDEEVAGKKS FSAQEREYIR |
| | WWVIAVTTLV SSAFLIVKVI LSELLSKGAF GYLLPIVSFV LAWLETWFLD FKVLPQEAEE |
| | LLFISLLWII ELNTNTGIRK NLEQEIIQYN FKTSFFDIFV LAFFRFSGLL LGYAVLRLRH |
| Sequence: | MSKLPRELTR DLERSLPAVA SLGSSLSHSQ SLSSHLLPPP EKRRAISDVR RTFCLFVTFD |
| | |

Characteristics: Key Benefits:

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 1/5 | Product datasheet for ABIN3099933 | 04/17/2024 | Copyright antibodies-online. All rights reserved.

- · 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 posttranslational 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 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.
- 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.

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 2/5 | Product datasheet for ABIN3099933 | 04/17/2024 | Copyright antibodies-online. All rights reserved.

| Product Details | |
|-------------------|--|
| 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: | STARD3 |
| Alternative Name: | STARD3 (STARD3 Products) |
| Background: | StAR-related lipid transfer protein 3 (Metastatic lymph node gene 64 protein) (MLN 64) (Protein CAB1) (START domain-containing protein 3) (StARD3),FUNCTION: Sterol-binding protein that mediates cholesterol transport from the endoplasmic reticulum to endosomes (PubMed:11053434, PubMed:15930133, PubMed:22514632, PubMed:28377464, PubMed:33124732). The sterol transport mechanism is triggered by phosphorylation of FFAT motif that leads to membrane tethering between the endoplasmic reticulum and late endosomes via interaction with VAPA and VAPB (PubMed:24105263, PubMed:28377464, PubMed:33124732). Acts as a lipid transfer protein that redirects sterol to the endosome at the expense of the cell membrane and favors membrane formation inside endosomes (PubMed:28377464). May also mediate cholesterol transport between other membranes, such as mitochondria membrane or cell membrane (PubMed:12070139, PubMed:19965586). However, such results need additional experimental evidences, probably mainly mediates cholesterol transport from the endoplasmic reticulum to endosomes (PubMed:28377464). Does not activate transcriptional cholesterol sensing (PubMed:28377464). Able to bind other lipids, such as lutein, a xanthophyll carotenoids that form the macular pigment of the retina (PubMed:21322544). {ECO:0000269 PubMed:11053434, ECO:0000269 PubMed:12070139, ECO:0000269 PubMed:15930133, ECO:0000269 PubMed:19965586, ECO:0000269 PubMed:21322544, ECO:0000269 PubMed:22514632, ECO:0000269 PubMed:21322544, ECO:0000269 PubMed:28377464, ECO:0000269 PubMed:28377464, ECO:0000269 PubMed:28377464, ECO:0000269 PubMed:28377464, ECO:0000269 PubMed:21322544, ECO:0000269 PubMed:28377464, ECO:00002 |
| Molecular Weight | 50.5 kDa |
| UniProt: | Q14849 |
| Pathways: | C21-Steroid Hormone Metabolic Process |

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 3/5 | Product datasheet for ABIN3099933 | 04/17/2024 | Copyright antibodies-online. All rights reserved.

| 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

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 5/5 | Product datasheet for ABIN3099933 | 04/17/2024 | Copyright antibodies-online. All rights reserved.