Datasheet for ABIN3136858

SENP2 Protein (AA 1-588) (Strep Tag)

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Overview

Quantity:	1 mg
Target:	SENP2
Protein Characteristics:	AA 1-588
Origin:	Mouse
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SENP2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MYRWLAKVLG TILRLCERPA PGARALLKRR RSSSTLFSTA VDTDEIPAKR PRLDCFIHQV KNSLYNAASL FGFPFQLTTK PMVSSACNGT RNVAPSGEVF SNSSSCELMS SGSCSSMLKL GNKSPNGISD YPKIRVTVTR DQPRRVLPSF GFTLKSEGYN RRPSGRRHSK SNPESSLTWK PQEQGVTEMI SEEGGKGVRR PHCTVEEGVQ KDEREKYRKL LERLKEGAHG STFPPTVSHH SSQRIQMDTL KTKGWVEEQN HGVRTTHFVP KQYRVVETRG PLCSMRSEKR YSKGKADTEK VVGLRFEKEG TRGHQMEPDL SEEVSARLRL GSGSNGLLRR KISVLEIKEK NFPSKEKDRR TEDLFEFTED MEKEISNALG HGPPDEILSS AFKLRITRGD IQTLKNYHWL NDEVINFYMN LLVERSKKQG YPALHAFSTF FYPKLKSGGY QAVKRWTKGV NLFEQELVLV PIHRKVHWSL VVMDLRKKCL KYLDSMGQKG HRICEILLQY LQDESKTKRN TDLNLLEWTH YSMKPHEIPQ QLNGSDCGMF TCKYADYISR DKPITFTQHQ MPLFRKKMVW EILHQQLL **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 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.

Product Details

	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)

Target Details

Target:	SENP2
Alternative Name:	Senp2 (SENP2 Products)
Background:	Sentrin-specific protease 2 (EC 3.4.22.-) (Axam2) (SUMO-1 protease 1) (SuPr-1) (SUMO-1/Smt3-specific isopeptidase 2) (Smt3ip2) (Sentrin/SUMO-specific protease SENP2),FUNCTION: Protease that catalyzes two essential functions in the SUMO pathway (PubMed:11489887, PubMed:20194620). The first is the hydrolysis of an alpha-linked peptide bond at the C-terminal end of the small ubiquitin-like modifier (SUMO) propeptides, SUMO1, SUMO2 and SUMO3 leading to the mature form of the proteins (By similarity). The second is the deconjugation of SUMO1, SUMO2 and SUMO3 from targeted proteins, by cleaving an epsilon-linked peptide bond between the C-terminal glycine of the mature SUMO and the lysine epsilon-amino group of the target protein (PubMed:11489887, PubMed:20194620, PubMed:27637147). May down-regulate CTNNB1 levels and thereby modulate the Wnt pathway (PubMed:11489887). Deconjugates SUMO2 from MTA1 (By similarity). Plays a dynamic role in adipogenesis by desumoylating and promoting the stabilization of CEBPB (PubMed:20194620). Acts as a regulator of the cGAS-STING pathway by catalyzing desumoylation of CGAS and STING1 during the late phase of viral infection (PubMed:27637147). {ECO:0000250|UniProtKB:Q9HC62, ECO:0000269|PubMed:11489887, ECO:0000269|PubMed:20194620, ECO:0000269|PubMed:27637147}., FUNCTION: [Isoform 3]: Activates transcription. {ECO:0000269|PubMed:12419228}.
Molecular Weight:	67.6 kDa
UniProt:	Q91ZX6
Pathways:	Chromatin Binding

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies

Application Details

	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)