

## Datasheet for ABIN3135756

# TSEN2 Protein (AA 1-460) (Strep Tag)



### Overview

Quantity:	250 μg
Target:	TSEN2
Protein Characteristics:	AA 1-460
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TSEN2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

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Product Details	
Brand:	AliCE®
Sequence:	MAEAVFRAPK RKRRVYESYE SPLPIPFGQD QGPRKEFRIF QAEMISNNVV VRGTEDMEQL
	YGKGYFGKGI LSRSRPNFTI ANPTLAARWK GVQTDMPIIT SEKYQHRVEW ARDFLRRQGH
	DESTVQKILT DYTEPLELPC REEKEETPQH EPLSSKADSS LEGRVEKDEL PVTPGGAGQS
	DDLPGLGTHS DCLQEGPGHA TLAAASPSSH NGHVAEDPEV LPQETLVPQG GLWPEASSQA
	AGEKRAAHEY VLIEEELCGA QEEEAAAASD EKLLKRKKLV CRRNPYRIFE YLQLSLEEAF
	FLAYALGCLS IYYEKEPLTI VKLWQAFTAV QPTFRTTYMA YHYFRSKGWV PKVGLKYGTD
	LLLYRKGPPF YHASYSVIIE LLDDNYEGSL RRPFSWKSLA ALSRVSGNVS KELMLCYLIK
	PSTMTAEDME TPECMKRIQV QEVILSRWVS SRERSDQDEL
	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 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 against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

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

## Target Details

Target:	TSEN2
Alternative Name:	Tsen2 (TSEN2 Products)
Background:	TRNA-splicing endonuclease subunit Sen2 (EC 4.6.1.16) (tRNA-intron endonuclease Sen2),FUNCTION: Constitutes one of the two catalytic subunit of the tRNA-splicing endonuclease complex, a complex responsible for identification and cleavage of the splice sites in pre-tRNA. It cleaves pre-tRNA at the 5'- and 3'-splice sites to release the intron. The products are an intron and two tRNA half-molecules bearing 2',3'-cyclic phosphate and 5'-OH termini. There are no conserved sequences at the splice sites, but the intron is invariably located at the same site in the gene, placing the splice sites an invariant distance from the constant structural features of the tRNA body. Probably carries the active site for 5'-splice site cleavage. The tRNA splicing endonuclease is also involved in mRNA processing via its association with pre-mRNA 3'-end processing factors, establishing a link between pre-tRNA splicing and pre-mRNA 3'-end
	formation, suggesting that the endonuclease subunits function in multiple RNA-processing events (By similarity). {ECO:0000250}.
Molecular Weight:	52.2 kDa
UniProt:	Q6P7W5
Pathways:	Nuclear Receptor Transcription Pathway, Regulation of Lipid Metabolism by PPARalpha
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.  Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months