

Datasheet for ABIN3089566

ASMTL Protein (AA 1-621) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	ASMTL
Protein Characteristics:	AA 1-621
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ASMTL protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	<p>MVLCPVIGKL LHKRVVLASA SPRRQEILSN AGLRFEVVPS KFKEKLDKAS FATPYGYAME</p> <p>TAKQKALEVA NRLYQKDLRA PDVVIGADTI VTVGGLILEK PVDKQDAYRM LSRLSGREHS</p> <p>VFTGVAIVHC SSKDHQLDTR VSEFYEETKV KFSELSEELL WEYVHSGEPM DKAGGYGIQA</p> <p>LGGMLVESVH GDFLNVVGFP LNHFKQLVK LYPPRPEDL RRSVKHDSIP AADTFEDLSD</p> <p>VEGGGSEPTQ RDAGSRDEKA EAGEAGQATA EAECRTRET LPPFPTRLLE LIEGFMLS KG</p> <p>LLTACKLVF DLLKDEAPQK AADIASKVDA SACGMERLLD ICAAMGLLEK TEQGYSTET</p> <p>ANVYLASDGE YSLHGFIMHN NDLTWNLFY LEFAIREGTN QHHRALGKKA EDLFQDAYYQ</p> <p>SPETRLRFMR AMHGMTKLTA CQVATAFNLS RFSSACDVGG CTGALARELA REYPRMQVTV</p> <p>FDLPDIIELA AHFQPPGPQA VQIHFAAGDF FRDPLPSAEL YVLCRILHDW PDDKVHKLLS</p> <p>RVAESCKPGA GLLLVELLD EEKRVQAL MQSLNMLVQT EGKERSLGEY QCLLELHGFH</p> <p>QVQVVHLGGV LDAILATKVA P</p>

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 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 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).

Product Details

Grade: custom-made

Target Details

Target: ASMTL

Alternative Name: ASMTL ([ASMTL Products](#))

Background: Probable bifunctional dTTP/UTP pyrophosphatase/methyltransferase protein [Includes: dTTP/UTP pyrophosphatase (dTTPase/UTPase) (EC 3.6.1.9) (Nucleoside triphosphate pyrophosphatase) (Nucleotide pyrophosphatase) (Nucleotide PPase), N-acetylserotonin O-methyltransferase-like protein (ASMTL) (EC 2.1.1.-)],FUNCTION: Nucleoside triphosphate pyrophosphatase that hydrolyzes dTTP and UTP. Can also hydrolyze CTP and the modified nucleotides pseudo-UTP, 5-methyl-UTP (m(5)UTP) and 5-methyl-CTP (m(5)CTP). Has weak activity with dCTP, 8-oxo-GTP and N(4)-methyl-dCTP (PubMed:24210219). May have a dual role in cell division arrest and in preventing the incorporation of modified nucleotides into cellular nucleic acids (PubMed:24210219). In addition, the presence of the putative catalytic domain of S-adenosyl-L-methionine binding in the C-terminal region argues for a methyltransferase activity (Probable). {ECO:0000269|PubMed:24210219, ECO:0000305}.

Molecular Weight: 68.9 kDa

UniProt: [095671](#)

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!

Application Details

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 Might differ depending on protein.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months