Datasheet for ABIN3086758

PUS7 Protein (AA 1-661) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	PUS7
Protein Characteristics:	AA 1-661
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PUS7 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MEMTEMTGVS LKRGALVVED NDSGVPVEET KKQKLSECSL TKGQDGLQND FLSISEDVPR PPDTVSTGKG GKNSEAQLED EEEEEEDGLS EECEEEESES FADMMKHGLT EADVGITKFV SSHQGFSGIL KERYSDFVVH EIGKDGRISH LNDLSIPVDE EDPSEDIFTV LTAEEKQRLE ELQLFKNKET SVAIEVIEDT KEKRTIIHQA IKSLFPGLET KTEDREGKKY IVAYHAAGKK ALANPRKHSW PKSRGSYCHF VLYKENKDTM DAINVLSKYL RVKPNIFSYM GTKDKRAITV QEIAVLKITA QRLAHLNKCL MNFKLGNFSY QKNPLKLGEL QGNHFTVVLR NITGTDDQVQ QAMNSLKEIG FINYYGMQRF GTTAVPTYQV GRAILQNSWT EVMDLILKPR SGAEKGYLVK CREEWAKTKD PTAALRKLPV KRCVEGQLLR GLSKYGMKNI VSAFGIIPRN NRLMYIHSYQ SYVWNNMVSK RIEDYGLKPV PGDLVLKGAT ATYIEEDDVN NYSIHDVVMP LPGFDVIYPK HKIQEAYREM LTADNLDIDN MRHKIRDYSL SGAYRKIIIR PQNVSWEVVA YDDPKIPLFN TDVDNLEGKT PPVFASEGKY RALKMDFSLP PSTYATMAIR EVLKMDTSIK NQTQLNTTWL R

Product Details

	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:	PUS7
Alternative Name:	PUS7 (PUS7 Products)
Background:	Pseudouridylate synthase 7 homolog (EC 5.4.99.-),FUNCTION: Pseudouridylate synthase that catalyzes pseudouridylation of RNAs (PubMed:28073919, PubMed:29628141, PubMed:30778726, PubMed:31477916, PubMed:35051350, PubMed:34718722). Acts as a regulator of protein synthesis in embryonic stem cells by mediating pseudouridylation of RNA fragments derived from tRNAs (tRFs): pseudouridylated tRFs inhibit translation by targeting the translation initiation complex (PubMed:29628141). Also catalyzes pseudouridylation of mRNAs: mediates pseudouridylation of mRNAs with the consensus sequence 5'-UGUAG-3' (PubMed:28073919, PubMed:31477916, PubMed:35051350). Acts as a regulator of pre-mRNA splicing by mediating pseudouridylation of pre-mRNAs at locations associated with alternatively spliced regions (PubMed:35051350). Pseudouridylation of pre-mRNAs near splice sites directly regulates mRNA splicing and mRNA 3'-end processing (PubMed:35051350). In addition to mRNAs and tRNAs, binds other types of RNAs, such as snRNAs, Y RNAs and vault RNAs, suggesting that it can catalyze pseudouridylation of many RNA types (PubMed:29628141). {ECO:0000269|PubMed:28073919, ECO:0000269|PubMed:29628141, ECO:0000269|PubMed:30778726, ECO:0000269|PubMed:31477916, ECO:0000269|PubMed:34718722, ECO:0000269|PubMed:35051350}.
Molecular Weight:	75.0 kDa
UniProt:	Q96PZ0

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

Application Details

	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 **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