

Datasheet for ABIN3129537

GTF2H1 Protein (AA 1-547) (Strep Tag)



Overview

Quantity:	250 μg
Target:	GTF2H1
Protein Characteristics:	AA 1-547
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This GTF2H1 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details	
Brand:	AliCE®
Sequence:	MATSSEEVLL IVKKVRQKKQ DGALYLMAER IAWAPEGKDR FTISHMYADI KCQKISPEGK
	AKIQLQLVLH AGDTTNFHFS NESTAVKERD AVKDLLQQLL PKFKRKANKE LEEKNRMLQE
	DPVLFQLYKD LVVSQVISAE EFWANRLNVN ATDSSTSSHK QDVGISAAFL ADVRPQTDGC
	NGLRYNLTSD IIESIFRTYP AVKMKYAETV PHNMTEKEFW TRFFQSHYFH RDRLNTGSKD
	LFAECAKIDE KGLKTMVSLG VKNPMLDLTS LEDKPLDEGY SISSVPSTSN SKSIKENSNA
	AIIKRFNHHS AMVLAAGLRK QQAQNGQNGE PSSVDGNSGD TDCFQPAVKR AKLQESIEYE
	DLGNNNSVKT IALNLKKSDR YYHGPTPIQS LQYATSQDII NSFQSIRQEM EAYTPKLTQV
	LSSSAASSTI TALSPGGALM QGGTQQAVNQ MVPNDIQSEL KHLYVAVGEL LRHFWSCFPV
	NTPFLEEKVV KMKSNLERFQ VTKLCPFQEK IRRQYLSTNL VSHIEEMLQT AYNKLHTWQS
	RRLMKKT
	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:	GTF2H1
Alternative Name:	Gtf2h1 (GTF2H1 Products)
Background:	General transcription factor IIH subunit 1 (Basic transcription factor 2 62 kDa subunit) (BTF2 p62) (General transcription factor IIH polypeptide 1) (TFIIH basal transcription factor complex p62 subunit), FUNCTION: Component of the general transcription and DNA repair factor IIH (TFIIH) core complex, which is involved in general and transcription-coupled nucleotide excisio repair (NER) of damaged DNA and, when complexed to CAK, in RNA transcription by RNA polymerase II. In NER, TFIIH acts by opening DNA around the lesion to allow the excision of the damaged oligonucleotide and its replacement by a new DNA fragment. In transcription, TFIIH has an essential role in transcription initiation. When the pre-initiation complex (PIC) has been established, TFIIH is required for promoter opening and promoter escape. Phosphorylation of the C-terminal tail (CTD) of the largest subunit of RNA polymerase II by the kinase module CAK controls the initiation of transcription. {ECO:0000250 UniProtKB:P32780}.
Molecular Weight:	61.9 kDa
UniProt:	Q9DBA9
Pathways:	DNA Damage Repair
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 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