Datasheet for ABIN3134844

EIF5B Protein (AA 1-1216) (Strep Tag)

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Overview

Quantity:	1 mg
Target:	EIF5B
Protein Characteristics:	AA 1-1216
Origin:	Mouse
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This EIF5B protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MGKKQKNKSE DSTKDDTDLG ALAAEIEGAG AAKEQEPQKS KGKKKKEKKK QDFDENDILR ELEELSLEAQ GIRADRDAAA VKPTENNEEE SASKQDKKKK GQKGKKTSFD ENDSEELEDK DSKSKKTARP NSEAPLSGSE DADDSNKLSK KGKKAQKSTK KRDGSEEDED NSKRSKERSR VNSSGESGGE SDEFLQSRKG QKKNQKNKSV PTVDSGNEDD DSSFKIKTVA QKKAEKKERE KKKRDEEKAK LRKMKEKEEL EKGKKEQSKQ REPQKRPEEE VLTLRGTPDT GAASEEKGDT AAALEDDNEG DKKKKDKKKK KTEKDEKEKE KKKGPSKSTV KAIQEALAKL KEEEERQKRE EEERIKRLEE LEAKRKEEER LEQEKRERKK QKEKERKERL KKEGKLLTKS QREARARAEV TLRHLQAQGV EVPSKDSLPK KRPVYEDKKK KKTPQQLESK EVSETLEISA PVEAVDQGGP EKEETPPSVE PEEEEDTEDA GLDDWEAMAS DEEREKEGNM IHIEVEENPE EEEEEEEEEE EEESEDEEEE GDSEGSDGDE EDCKLSDEKD SGKAGDTKPS KDASSDSEYD SDDDRTKEER AYDKAKRRIE KRRLEHGKNV NTEKLRAPII CVLGHVDTGK TKILDKLRHT HVQDGEAGGI TQQIGATNVP LEAINEQTKM IKNFDRENVR IPGMLIIDTP GHESFSNLRN RGSSLCDIAI

LVVDIMHGLE PQTIESINIL KSKKCPFIVA LNKIDRLYDW KKSPDSDVAV TLKKQKKNTK DEFEERAKAI IVEFAQQGLN AALFYENKDP RTFVSLVPTS AHTGDGMGSL IYLLVELTQT MLSKRLAHCE ELRAQVMEVK ALPGMGTTID VILINGRLKE GDTIIVPGVE GPIVTQIRGL LLPPPMKELR VKNQYEKHKE VEAAQGVKIL GKDLEKTLAG LPLLVAYKDD EIPVLKDELI HELKQTLNAI KLEEKGVYVQ ASTLGSLEAL LEFLKTSEVP YAGINIGPVH KKDVMKASVM LEHDPQYAVI LAFDVRIERD AQEMADSLGV RIFSAEIIYH LFDAFTKYRQ DYKKQKQEEF KHIAVFPCKM KILPQYIFNS RDPIVIGVTV EAGQVKQGTP MCVPSKNFVD IGIVTSIEIN HKQVDVAKKG QEVCVKIEPI PGESPKMFGR HFEATDILVS KISRQSIDAL KDWFRDEMQK SDWQLIVELK KVFEII

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!

Product Details

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. 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:	EIF5B
Alternative Name:	Eif5b (EIF5B Products)
Background:	Eukaryotic translation initiation factor 5B (eIF-5B) (EC 3.6.5.3) (Translation initiation factor IF-2),FUNCTION: Plays a role in translation initiation. Ribosome-dependent GTPase that promotes the joining of the 60S ribosomal subunit to the pre-initiation complex to form the 80S initiation complex with the initiator methionine-tRNA in the P-site base paired to the start codon. Together with eIF1A (EIF1AX), actively orients the initiator methionine-tRNA in a conformation that allows 60S ribosomal subunit joining to form the 80S initiation complex. Is released after formation of the 80S initiation complex. Its GTPase activity is not essential for ribosomal subunits joining, but GTP hydrolysis is needed for eIF1A (EIF1AX) ejection quickly followed by EIF5B release to form elongation-competent ribosomes. In contrast to its procaryotic homolog, does not promote recruitment of Met-rRNA to the small ribosomal subunit. {ECO:0000250|UniProtKB:O60841}.
Molecular Weight:	137.6 kDa
UniProt:	Q05D44

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. 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)