Datasheet for ABIN3134575

SMG6 Protein (AA 1-1418) (Strep Tag)

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Overview

Quantity:	1 mg
Target:	SMG6
Protein Characteristics:	AA 1-1418
Origin:	Mouse
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SMG6 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence:	MAEGLERVRI SASELRGILA TLAPQAGSRE NMKELKEPRQ RKDNRRPDLE IYKPGLSRLR NRPKTKEASG NEEFKDEIVN DRDSSAVGND TQLIQVCKEL DSQQQNGPID AENSQAQETF PKTVGLEDRS LKIIKRSKKP DLQIYQPGRR LQTITKESAG RADEEEILNQ VEQLRIEEDE CKGEAIKEEV NNKPDKTEIE KHQSNDRVRT AKGEKGKKIE KGEGSKKVAD DSVPGKPGSV KRYSRSDKRR NRYRTCSTSS AGSNNSAEGA GLTDNGCRRR RQDRAKERPR LKKQVSLSST DSLDEDRVDE PDVLGSRRSS ERKKHLERNW SGCGEGEQKS NGKENRSALR VTFDAETMSK DSPVVRSVKD NVDRMKSDKG PSSGGKGSEK QELRHPRQEL RDRGRGILIL PAHTALSVSS SGSPESTPLG PRLLFGSGSK GSRSWGRGGT TRRLWDPNNP DQKPALKSQT PQLHFLDTDD EISPTSWGDS RQAQASYYKF QNSDNPYYYP RTPGPASQYP YAGYSPLQYP VGPTNGMYPG AYYPGYPAPS GQYVCSPLPA STMSPEEIEQ HVRNMQQQEL HRLLRVADNQ ELQLSNLLSR DRISTEGMEK MAQLRTELLQ LYERCILLDI EFSDSQNVDQ ILWKNAFYQV IEKFRQLLKD PNSENPEQIR NRLLELLDEG SDFFDSLLQK LQVTYKFKLE DYMDGLAIRS KPLRKTVKYA

LISAQRSMIC QGDISRYREQ ANDTANYGKA RSWYLKAQHI APKNGRPYNQ LALLAVYTRR KLDAVYYYMR SLAASNPILT AKESLMSLFE ETKRKAEQME KKQHEEFDMS PDKWRKGKKS TFRHVGDDTT RLEIWIHPSH SRSAQGTESG KDSEQENGLG SLSPSDLNKR FILSFLHAHG KLFTRIGMET FPAVAEKVLK EFQVLLQHSP SPIGSTRMLQ LMTINMFAVH NSQLKDCFSE ECRSVIQEQA ASLGLAMFSL LVQRCTCLLK DSAKAQLSSP EDQEDQDDIK VSSFVPDLKE LLPSVKVWSD WMLGYPDTWN PPPTSLDLPL QVAVDVWSTL ADFCNILTAV NQSEVPLYKD PDDDLTLLIL EEDRLLSGFV PLLAAPQDPC YVEKTSDKVI AADCKRVTVL KYFLEALCGQ EEPLLAFKGG KYVSVAPVPD TMGKEMGSQE GKQLEDEEED VVIEDFEEDS EAEGSGGEDD IRELRAKKLA LARKIAEQQR RQEKIQAVLE DQSQMRQMEL EIRPLFLVPD TNGFIDHLAS LARLLESRKY ILVVPLIVIN ELDGLAKGQE TDHRAGGYAR VVQEKARKSI EFLERRFESR DSCLRALTSR GNELESIAFR SEDITGQLGN NDDLILSCCL HYCKDKAKDY MPTSKEEPIR LLREVVLLTD DRNLRVKALT RNVPVRDIPA FLTWAQVG

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

Product Details

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 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)
Grade:	Crystallography grade

Target Details

Target:	SMG6
Alternative Name:	Smg6 (SMG6 Products)
Background:	Telomerase-binding protein EST1A (EC 3.1.-.-) (Ever shorter telomeres 1A) (Nonsense mediated mRNA decay factor SMG6) (Smg-6 homolog),FUNCTION: Component of the telomerase ribonucleoprotein (RNP) complex that is essential for the replication of chromosome termini. May have a general role in telomere regulation. Promotes in vitro the ability of TERT to elongate telomeres. Overexpression induces telomere uncapping, chromosomal end-to-end fusions (telomeric DNA persists at the fusion points) and did not perturb TRF2 telomeric localization. Binds to the single-stranded 5'-(GTGTGG)(4)GTGT-3' telomeric DNA, but not to a telomerase RNA template component (TER). {ECO:0000250|UniProtKB:Q86US8}., FUNCTION: Plays a role in nonsense-mediated mRNA decay. Is thought to provide a link to the mRNA degradation machinery as it has endonuclease activity required to initiate NMD, and to serve as an adapter

Target Details

	for UPF1 to protein phosphatase 2A (PP2A), thereby triggering UPF1 dephosphorylation. Degrades single-stranded RNA (ssRNA), but not ssDNA or dsRNA. {ECO:0000250|UniProtKB:Q86US8}.
Molecular Weight:	160.5 kDa
UniProt:	P61406

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)

