Datasheet for ABIN3136442

SMC5 Protein (AA 1-1101) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	SMC5
Protein Characteristics:	AA 1-1101
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SMC5 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MATPSGKAAP PNPQVSKRSL PRDASSEVPS KRKNSNPLPT LPRPSGTFVE GSIVRIAMEN FLTYDICEVS PGPHLNMIIG ANGTGKSSIV CAICLGLAGK PAFMGRADKV GFFVKRGCSK GLVEIELFRT SGNLIITREI DVIKNQSFWF INKKPVTQKI VEEQVAALNI QVGNLCQFLP QDKVGEFAKL SKIELLEATE KSVGPPEMHR YHCELKNFRE KEKQLETSCK EKTEYLEKMV QRNERYKQDV ERFYERKRHL DLIEMLEAKR PWVEYENVRQ EYEGVKLIRD RVKEEVRKLK EGQIPMTRRI EEIDRQRHTL EVRIKEKSTD IKEASQKCKQ RQDLIERKDR QIKELQQALT VKQNEELDRQ KRISNTRKMI EDLQSELKTA ENCENLQPQI DTVTNDLRRV QEEKALCEGE IIDKQREKEM LEKQRRSVSD HITRFDNLMN QKEDKLRQRY RDTYDAVLWL RNNRDRFKQR VCEPIMLTIN MKDNKNAKYV ENHISSNDLR AFVFESQEDM EIFLREVRDN KKLRVNAVIA PKISYADKAP SRSLNDLKQY GFFSYLRELF DAPDPVMSYL CCQYHIHEVP VGTERTRERI ERVIQETRLK QIYTAEEKYV LKTSVYSNKV ISSNTSLKVA QFLTVTVDLE QRRHLEEQLK

EMNRQLEAVD SGLAALRDTN RHLELKDNEL RLKKKELLER KTRKRQLEQK ISSKLASIRL MEQDTCNLEE EERKASTKIK EINVQKAKLV TELTGLVKIC TSFQIQKVDL ILQNTTVISE KNKLEADYMA SSSQLRVTEQ QFIELDDNRQ RLLQKCKELM KKARQVCNLS ADQAVPQEFQ TQVPTIPNGH SSSPPMAFQD LPNTLDEIDA LLTEERSRAS CFTGLNPSVV EEYSKREVEI QQLTEELQGK KVELDEYREN ISQVKERWLN PLKELVEKIN EKFSNFFSSM QCAGEVDLHT ENEEDYDKYG IRIRVKFRSS TQLHELTPHH QSGGERSVST MLYLMALQEL NRCPFRVVDE INQGMDPINE RRVFEMVVNT ACKENTSQYF FITPKLLQNL PYSEKMTVLF VYNGPHMLEP NRWNLKAFQR RRRRITFTQP Q

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:

Product Details

- 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:	SMC5
Alternative Name:	Smc5 (SMC5 Products)
Background:	Structural maintenance of chromosomes protein 5 (SMC protein 5) (SMC-5) (mSMC5) (Protein expressed in male leptotene and zygotene spermatocytes 453) (MLZ-453),FUNCTION: Core component of the SMC5-SMC6 complex, a complex involved in repair of DNA double-strand breaks by homologous recombination. The complex may promote sister chromatid homologous recombination by recruiting the SMC1-SMC3 cohesin complex to double-strand breaks. The complex is required for telomere maintenance via recombination and mediates sumoylation of shelterin complex (telosome) components. Required for sister chromatid cohesion during prometaphase and mitotic progression, the function seems to be independent of SMC6 (By similarity). {ECO:0000250}.
Molecular Weight:	128.8 kDa
UniProt:	Q8CG46

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.

Application Details

	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