

Datasheet for ABIN3095550
SMC6 Protein (AA 1-1091) (Strep Tag)[Go to Product page](#)

1 Image

Overview

Quantity:	1 mg
Target:	SMC6
Protein Characteristics:	AA 1-1091
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SMC6 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MAKRKEENFS SPKNAKRPRQ EELEDFDKDG DEDECKGTTL TAAEVGIIES IHLKNFMCHS MLGPFKFGSN VNFVVGNGS GKSAVLTALI VGLGGRAVAT NRGSSLKGFV KDGQNSADIS ITLRNRGDDA FKASVYNSI LIQQHISIDG SRSYKLKSAT GSVVSTRKEE LIAILDHFNI QVDNPVSVLT QEMSKQLQS KNEGDYKFF MKATQLEQMK EDYSYIMETK ERTKEQIHQG EERLTELRQ CVEKEERFQS IAGLSTMKTN LESLKHEMAW AVVNEIEKQL NAIRDNIKIG EDRAARLDRK MEEQQVRLNE AEQKYKDIQD KLEKISEETN ARAPECMALK ADVVAKKRAY NEAEVLYNRS LNEYKALKKD DEQLCKRIEE LKKSTDQSLE PERLERQKKI SWLKERVKAF QNGENSVNQE IEQFQQAIEK DKEEHGKIKR EELDVKHALS YNQRQLKELK DSKTDRLKRF GPNVPALLEA IDDAYRQGHF TYKPVGPLGA CIHLRDPELA LAIESCLKGL LQAYCCHNHA DERVLQALMK RFYLPGTSRP PIIVSEFRNE IYDVRHRAAY HPDFPTVLT LEIDNAVVAN SLIDMRGIET VLLIKNNSVA RAVMQSQKPP KNCREAFTAD GDQVFAGRY Y SSENTRPKFL SRDVDSEISD LENEVENKTA QILNLQQHLS ALEKDIKHNE ELLKRCQLHY KELKMKIRKN
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ISEIRELENI EEHQSVDIAT LEDEAQENKS KMKMVEEHME QQKENMEHLK SLKIEAENKY
DAIKFKINQL SELADPLKDE LNLADSEVDN QKRGKRHYEE KQKEHLDTLN KKKRELDMKE
KELEEKMSQA RQICPERIEV EKSASILDKE INRLRQKIQA EHASHGDREE IMRQYQEARE
TYLDLDSKVR TLKKFIKLLG EIMEHRFKTY QQFRRCLTLR CKLYFDNLLS QRAYCGKMNF
DHKNETLSIS VQPGEGNKA FNDMRALSGG ERSFSTVCFI LSLWSIAESP FRCLDEFDVF
MDMVNRRIAM DLILKMADSQ RFRQFILLTP QSMSSLPSSK LIRILRMSDP ERGQTTLPRF
PVTQEEDDDQ R

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!

Concentration:

Product Details

- 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:	SMC6
Alternative Name:	SMC6 (SMC6 Products)
Background:	Structural maintenance of chromosomes protein 6 (SMC protein 6) (SMC-6) (hSMC6),FUNCTION: Core component of the SMC5-SMC6 complex, a complex involved in 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 in ALT (alternative lengthening of telomeres) cell lines and mediates sumoylation of shelterin complex (telosome) components which is proposed to lead to shelterin complex disassembly in ALT-associated PML bodies (APBs). Required for recruitment of telomeres to PML nuclear bodies. SMC5-SMC6 complex may prevent transcription of episomal DNA, such as circular viral DNA genome (PubMed:26983541). {ECO:0000269 PubMed:16810316, ECO:0000269 PubMed:17589526, ECO:0000269 PubMed:26983541}.
Molecular Weight:	126.3 kDa
UniProt:	Q96SB8

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.
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Comment:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> 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.</p> <p>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!</p>
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Restrictions:	For Research Use only
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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)



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process