Datasheet for ABIN3136443

SMC4 Protein (AA 1-1286) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	SMC4
Protein Characteristics:	AA 1-1286
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SMC4 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MRRKGTKPST ACHQEEGPPP SQDGAHSDEE MEQPAGEAES AAPAKPPGEE LDNRSLEEIL NSIPPPPPPA MASEAGAPRL MITHIVNQNF KSYAGEKVLG PFHKRFSCII GPNGSGKSNV IDSMLFVFGY RAQKIRSKKL SVLIHNSDEH KDIQSCTVEV HFQKIIDKEG DDYEVLPNSN FYVSRTAYRD STSVYHISGK KKTFKDVGNL LRSHGIDLDH NRFLILQGEV EQIAMMKPKG QTEHDEGMLE YLEDIIGCGR LNEPIKVLCR RVEILNEHRG EKLNRVKMVE KEKDALEGEK NIAIEFLTLE NEMFKKKNHI CQYYIYDLQN RIAEITTQKE KIHEDTKEIT EKSNVLSNEM KAKNSAVKDV EKKLNKVTKF IEQNKEKFTQ LDLEDVQVRE KLKHATSKAK KLEKQLQKDK EKVEELKSVP AKSKTVINET TTRNNSLEKE REKEEKKLKE VMDSLKQETQ GLQKEKEIQE KELMGFNKSV NEARSKMEVA QSELDIYLSR HNTAVSQLSK AKEALITASE TLKERKAAIK DINTKLPQTQ QELKEKEKEL QKLTQEEINL KSLVHDLFQK VEEAKSSLAM NRSRGKVLDA IIQEKKSGRI PGIYGRLGDL GAIDEKYDIA ISSCCHALDY IVVDSIDTAQ ECVNFLKKHN IGIATFIGLD

KMTVWAKKMS KIQTPENTPR LFDLVKVKNE EIRQAFYFAL RDTLVANNLD QATRVAYQRD RRWRVVTLQG QIIEQSGTMS GGGSKVMRGR MGSSVIDEIS VEEVNKMESQ LERHSKQAMQ IQEQKVQHEE AVVKLRHSER DMRNTLEKFA ASIQGLSEQE EYLCVQIKEL EANVLTTAPD RKQQKLLEEN VSVFKKEYDA VAEKAGKVEA EIKRLHNTII DINNRKLKAQ QNKLDTINKQ LDECASAITK AQVAIKTADR NLKKAQDSVC RTEKEIKDTE KEINDLKTEL KNIEDKAEEV INNTKTAETS LPEIQKEHRN LLQELKVIQE NEHALQKDAL SIKLKLEQID GHISEHNSKI KYWQKEISKI KLHPVEDNPV ETVAVLSQEE LEAIKNPESI TNEIALLEAQ CREMKPNLGA IAEYKKKEDL YLQRVAELDK ITSERDNFRQ AYEDLRKQRL NEFMAGFYVI TNKLKENYQM LTLGGDAELE LVDSLDPFSE GIMFSVRPPK KSWKKIFNLS GGEKTLSSLA LVFALHHYKP TPLYFMDEID AALDFKNVSI VAFYIYEQTK NAQFIIISLR NNMFEISDRL IGIYKTYNST KSVAVNPKQI ASKGLC

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 -

Product Details

	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:	SMC4
Alternative Name:	Smc4 (SMC4 Products)
Background:	Structural maintenance of chromosomes protein 4 (SMC protein 4) (SMC-4) (Chromosome-associated polypeptide C) (XCAP-C homolog),FUNCTION: Central component of the condensin complex, a complex required for conversion of interphase chromatin into mitotic-like condense chromosomes. The condensin complex probably introduces positive supercoils into relaxed DNA in the presence of type I topoisomerases and converts nicked DNA into positive knotted forms in the presence of type II topoisomerases (By similarity). {ECO:0000250}.
Molecular Weight:	146.9 kDa
UniProt:	Q8CG47

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