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Datasheet for ABIN3086583

PSMC4 Protein (AA 1-418) (Strep Tag)

Overview

Quantity:	1 mg
Target:	PSMC4
Protein Characteristics:	AA 1-418
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PSMC4 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Sequence: MEEIGILVEK AQDEIPALSV SRPQTGLSFL GPEPEDLEDL YSRYKKLQQE LEFLEVQEEY
IKDEQKNLKK EFLHAQEEVK RIQSIPLVIG QFLEAVDQNT AIVGSTTGSN YYVRILSTID
RELLKPNASV ALHKHSNALV DVLPEADSS IMMLTSDQKP DVMYADIGGM DIQKQEVREA
VELPLTHFEL YKQIGIDPPR GVLMYGPPGC GKTMLAKAVA HHTTAAFIRV VGSEFVQKYL
GEGPRMVRDV FRLAKENAPA IIFIDEIDAI ATKRFDAQTG ADREVQRILL ELLNQMDGFD
QNVNVKVIMA TNRADTLDPA LLRPGRDRK IEFPLPDRRQ KRLIFSTITS KMNLSEEVDL
EDYVARPDKI SGADINSICQ ESGMLAVREN RYIVLAKDFE KAYKTVIKKD EQEHEFYK

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.

Product Details

- 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:

- 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: > 80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Target Details

Target: PSMC4

Alternative Name: PSMC4 ([PSMC4 Products](#))

Background: 26S proteasome regulatory subunit 6B (26S proteasome AAA-ATPase subunit RPT3) (MB67-

Target Details

interacting protein) (MIP224) (Proteasome 26S subunit ATPase 4) (Tat-binding protein 7) (TBP-7),FUNCTION: Component of the 26S proteasome, a multiprotein complex involved in the ATP-dependent degradation of ubiquitinated proteins. This complex plays a key role in the maintenance of protein homeostasis by removing misfolded or damaged proteins, which could impair cellular functions, and by removing proteins whose functions are no longer required. Therefore, the proteasome participates in numerous cellular processes, including cell cycle progression, apoptosis, or DNA damage repair. PSMC4 belongs to the heterohexameric ring of AAA (ATPases associated with diverse cellular activities) proteins that unfolds ubiquitinated target proteins that are concurrently translocated into a proteolytic chamber and degraded into peptides. {ECO:0000269|PubMed:1317798, ECO:0000269|PubMed:8060531}.

Molecular Weight: 47.4 kDa

UniProt: [P43686](#)

Pathways: [Mitotic G1-G1/S Phases](#), [DNA Replication](#), [Synthesis of DNA](#), [Ubiquitin Proteasome Pathway](#)

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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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,

Handling

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)