

Datasheet for ABIN3094723

PRC1 Protein (AA 1-620) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	PRC1
Protein Characteristics:	AA 1-620
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PRC1 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AlIcE®
Sequence:	<p>MRRSEVLAAE SIVCLQKALN HLREIWELIG IPEDQRLQRT EVVKKHIKEL LDMMIAEEES</p> <p>LKERLIKSIS VCQKELNTLC SELHVEPFQE EGETTILQLE KDLRTQVELM RKQKKERKQE</p> <p>LKLLQEQQDE LCEILCMPHY DIDSASVPSL EELNQFRQHV TTLRETKASR REEFVSIKRQ</p> <p>IILCMEALDH TPDTSEFERDV VCEDEDAFCL SLENIATLQK LLRQLEMQKS QNEAVCEGLR</p> <p>TQIRELWDRL QIPEEEREAV ATIMSGSKAK VRKALQLEVD RLEELKMQNM KKVIEAIRVE</p> <p>LVQYWDQCFY SQEQRQAFAP FCAEDYTESL LQLHDAEIVR LKNYYEVHKE LFEGVQKWEE</p> <p>TWRLFLEFER KASDPNRFTN RGGNLLKEEK QRAKLQKMLP KLEELKARI ELWEQEHSKA</p> <p>FMVNGQKFME YVAEQWEMHR LEKERAKQER QLKNKKQTET EMLYGSAPRT PSKRRGLAPN</p> <p>TPGKARKLNT TTMSNATANS SIRPIFGGTV YHSPVSRLPP SGSKPVAAST CSGKKTPTTG</p> <p>RHGANKENLE LNGSILSGGY PGSAPLQRNF SINSVASTYS EFAKDPSLSD SSTVGLQREL</p> <p>SKASKSDATS GILNSTNIQS</p>

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:

- 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).

Product Details

Grade: custom-made

Target Details

Target: PRC1

Alternative Name: PRC1 ([PRC1 Products](#))

Background: Protein regulator of cytokinesis 1,FUNCTION: Key regulator of cytokinesis that cross-links antiparrallel microtubules at an average distance of 35 nM. Essential for controlling the spatiotemporal formation of the midzone and successful cytokinesis. Required for KIF14 localization to the central spindle and midbody. Required to recruit PLK1 to the spindle. Stimulates PLK1 phosphorylation of RACGAP1 to allow recruitment of ECT2 to the central spindle. Acts as an oncogene for promoting bladder cancer cells proliferation, apoptosis inhibition and carcinogenic progression (PubMed:17409436).
{ECO:0000269|PubMed:12082078, ECO:0000269|PubMed:15297875, ECO:0000269|PubMed:15625105, ECO:0000269|PubMed:16431929, ECO:0000269|PubMed:17409436, ECO:0000269|PubMed:19468300, ECO:0000269|PubMed:20691902, ECO:0000269|PubMed:9885575}.

Molecular Weight: 71.6 kDa

UniProt: [O43663](#)

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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Application Details

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