

Datasheet for ABIN3136958
CDK5RAP3 Protein (AA 1-503) (Strep Tag)



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Overview

| | |
|-------------------------------|---|
| Quantity: | 250 µg |
| Target: | CDK5RAP3 |
| Protein Characteristics: | AA 1-503 |
| Origin: | Mouse |
| Source: | Cell-free protein synthesis (CFPS) |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This CDK5RAP3 protein is labelled with Strep Tag. |
| Application: | ELISA, Western Blotting (WB), SDS-PAGE (SDS) |

Product Details

| | |
|-----------|---|
| Brand: | AliCE® |
| Sequence: | <p>MQDQHVPID IQTSKLLDWL VDRRHCHNLKW QSLVLTIREK INTAIQDMPE SQEIAQLLSG SYIHYFHCLR IVDLLKGTEA STKNIFGRYS SQRMKDWQEI VSLYEKDNITY LVELCSLLVR NVSYEIPSLK KQIAKCQQLQ QEYSRKEEEG QAGAAEMREQ FYHSCKQYGI TGDNVRRRELL ALVKDLPSQL AEIGAGAQLS GE AidLYQAC VEFVCDSPTE QVLPMLRYVQ KKG NSTVYEW RTGT E P S V E R P Q L E E P P E Q V Q E D E I D W G D F G V E A V S D S G I V A E T P G I D W G I S L E S E A K D A G A D K I D W G D D A A A S E I T V L E T G T E A P E G V A R G S D A L T L L E Y P E T R N Q F I D E L M E L E I F L S Q R A V E M S E E A D I L S V S Q F Q L A P A I L Q G Q T K E K M L S L V S T L Q Q L I G R L T S L R M Q H L F M I L A S P R Y V D R V T E F L Q Q K L K Q S Q L L A L K K E L M V E K Q Q E A L Q E Q A A L E P K L D L L L E K T R E L Q K L I E A D I S K R Y S G R P V N L M G T S L</p> <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</p> |

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).

Grade:

custom-made

Target Details

Target: CDK5RAP3

Alternative Name: Cdk5rap3 ([CDK5RAP3 Products](#))

Background: CDK5 regulatory subunit-associated protein 3,FUNCTION: Substrate adapter for ufmylation, the covalent attachment of the ubiquitin-like modifier UFM1 to substrate proteins, in response to endoplasmic reticulum stress (PubMed:30635284). Negatively regulates NF-kappa-B-mediated gene transcription through the control of RELA phosphorylation (By similarity). Probable tumor suppressor initially identified as a CDK5R1 interactor controlling cell proliferation (By similarity). Also regulates mitotic G2/M transition checkpoint and mitotic G2 DNA damage checkpoint (By similarity). Through its interaction with CDKN2A/ARF and MDM2 may induce MDM2-dependent p53/TP53 ubiquitination, stabilization and activation in the nucleus, thereby promoting G1 cell cycle arrest and inhibition of cell proliferation (By similarity). May also play a role in the rupture of the nuclear envelope during apoptosis (By similarity). May regulate MAPK14 activity by regulating its dephosphorylation by PPM1D/WIP1 (By similarity). Required for liver development (PubMed:30635284). {ECO:0000250|UniProtKB:Q96JB5, ECO:0000269|PubMed:30635284}.

Molecular Weight: 57.0 kDa

UniProt: [Q99LM2](#)

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.

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