

Datasheet for ABIN3091312

Cyclin A Protein (AA 1-432) (Strep Tag)[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	Cyclin A (CCNA2)
Protein Characteristics:	AA 1-432
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This Cyclin A protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence: MLGNSAPGPA TREAGSALLA LQQTALQEDQ ENINPEKAAP VQQRTRAAL AVLKSGNPRG
LAQQRPKTR RVAPLKDLPV NDEHVTVPPW KANSKQPAFT IHVDEAEKEA QKKPAESQKI
EREDALAFNS AISLPGPRKP LVPLDYPMDG SFESPHTMDM SIILEDEKPV SVNEVPDYHE
DIHTYLREME VKCKPKVGYM KKQPDITNSM RAILVDWLVE VGEEYKLQNE TLHLAVNYID
RFLSSMSVLR GKLQLVGTAA MLLASKFEEI YPPEVAEFVY ITDDTYTKKQ VLRMEHLVLK
VLTFDLAAPT VNQFLTQYFL HQQPANCKVE SLAMFLGELS LIDADPYLKY LPSVIAGAAF
HLALYVTGQ SWPESLIRKT GYTLESKPC LMDLHQTYLK APQHAQQSIR EKYKNSKYHG
VSLLNPPETL NL

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:
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Product Details

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

Target:	Cyclin A (CCNA2)
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Alternative Name:	CCNA2 (CCNA2 Products)
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Target Details

Background:	Cyclin-A2 (Cyclin-A) (Cyclin A),FUNCTION: Cyclin which controls both the G1/S and the G2/M transition phases of the cell cycle. Functions through the formation of specific serine/threonine protein kinase holoenzyme complexes with the cyclin-dependent protein kinases CDK1 or CDK2. The cyclin subunit confers the substrate specificity of these complexes and differentially interacts with and activates CDK1 and CDK2 throughout the cell cycle. {ECO:0000269 PubMed:1312467}.
Molecular Weight:	48.6 kDa
UniProt:	P20248
Pathways:	PI3K-Akt Signaling , Cell Division Cycle , AMPK Signaling , Mitotic G1-G1/S Phases , DNA Replication , M Phase , Synthesis of DNA

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:	<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>
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, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.

Handling

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: Unlimited (if stored properly)