

Datasheet for ABIN3134714

Aurora A Protein (AA 1-395) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	Aurora A (AURKA)
Protein Characteristics:	AA 1-395
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This Aurora A protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), ELISA, Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	<p>MDRCKENCVS RPKVKTTPFG PKRVLVTEQI PSQNLGSASS GQAQRVLCPS NSQRVPSQAQ KLGAGQKPAP KQLPAASVPR PVSRLNNPQK NEQPAASGND SEKEQASLQK TEDTKKRQWT LEDFDIGRPL GKGKFGNVYL ARERQSKFIL ALKVLFKTQL EKANVEHQLR REVEIQSHLR HPNILRLYGY FHDATRVYLI LEYAPLGTVEY RELQKLSKFD EQRTATYITE LANALSYCHS KRVIHRDIKP ENLLLGSGE LKIADFGWSV HAPSSRRTM CGTLDYLPPE MIEGRMHDEK VDLWSLGVLC YEFLVGMPPF EAHTYQETYS RISRVEFTFP DFVTEGARDL ISRLKHNAS QRLTLAEVLE HPWIKANSSK PPTGHTSKEP TSKSS</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 have a special request, please contact us.</p>
Characteristics:	Key Benefits:

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®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	Aurora A (AURKA)
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Target Details

Alternative Name: Aurka ([AURKA Products](#))

Background: Aurora kinase A (EC 2.7.11.1) (Aurora 2) (Aurora/IPL1-related kinase 1) (ARK-1) (Aurora-related kinase 1) (Ipl1- and aurora-related kinase 1) (Serine/threonine-protein kinase 15) (Serine/threonine-protein kinase 6) (Serine/threonine-protein kinase Ayk1) (Serine/threonine-protein kinase aurora-A),FUNCTION: Mitotic serine/threonine kinase that contributes to the regulation of cell cycle progression (By similarity). Associates with the centrosome and the spindle microtubules during mitosis and plays a critical role in various mitotic events including the establishment of mitotic spindle, centrosome duplication, centrosome separation as well as maturation, chromosomal alignment, spindle assembly checkpoint, and cytokinesis (PubMed:9245792, PubMed:19075002). Required for normal spindle positioning during mitosis and for the localization of NUMA1 and DCTN1 to the cell cortex during metaphase (By similarity). Required for initial activation of CDK1 at centrosomes (By similarity). Phosphorylates numerous target proteins, including ARHGEF2, BORA, BRCA1, CDC25B, DLGP5, HDAC6, KIF2A, LATS2, NDEL1, PARD3, PPP1R2, PLK1, RASSF1, TACC3, p53/TP53 and TPX2 (By similarity). Regulates KIF2A tubulin depolymerase activity (By similarity). Required for normal axon formation (By similarity). Plays a role in microtubule remodeling during neurite extension (PubMed:19668197). Important for microtubule formation and/or stabilization (By similarity). Also acts as a key regulatory component of the p53/TP53 pathway, and particularly the checkpoint-response pathways critical for oncogenic transformation of cells, by phosphorylating and destabilizing p53/TP53 (By similarity). Phosphorylates its own inhibitors, the protein phosphatase type 1 (PP1) isoforms, to inhibit their activity (By similarity). Inhibits cilia outgrowth (By similarity). Required for cilia disassembly via phosphorylation of HDAC6 and subsequent deacetylation of alpha-tubulin (PubMed:20643351). Regulates protein levels of the anti-apoptosis protein BIRC5 by suppressing the expression of the SCF(FBXL7) E3 ubiquitin-protein ligase substrate adapter FBXL7 through the phosphorylation of the transcription factor FOXP1 (By similarity). {ECO:0000250|UniProtKB:A0A8I3S724, ECO:0000250|UniProtKB:O14965, ECO:0000269|PubMed:19075002, ECO:0000269|PubMed:19668197, ECO:0000269|PubMed:20643351, ECO:0000269|PubMed:9245792}.

Molecular Weight: 44.8 kDa

UniProt: [P97477](#)

Pathways: [Cell Division Cycle, Asymmetric Protein Localization](#)

Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies

Application Details

as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Comment:

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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