

Datasheet for ABIN3091814

## CLK2 Protein (AA 1-499) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	CLK2
Protein Characteristics:	AA 1-499
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This CLK2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

### Product Details

Brand:	AliCE®
Sequence:	<p>MPHPRRYHSS ERGSRGSYRE HYRSRKHKRR RSRSWSSSSD RTRRRRRREDS YHVRSSSYD  DRSSDRRVYD RRYCGSYRRN DYSRDRGDY YTDYRHSYE YQRENSYSYR QRSSRRKHRR  RRRRSRTFSR SSSQHSSRA KSVEDDAEGH LIYHVGDWLQ ERYEIVSTLG EGTFGRVVQC  VDHRRGGARV ALKIIKNVEK YKEAARLEIN VLEKINEKDP DNKNLCVQMF DWFDYHGHMC  ISFELLGLST FDFLKDNNYL PYPIHQVRHM AFQLCQAVKF LHDNKLTHTD LKPENILFVN  SDYELTYNLE KKRDESVKS TAVRVVDFGS ATFDHEHHST IVSTRHYRAP EVILELGWSQ  PCDVWSIGCI IFEYYVGFTL FQTHDNREHL AMMERILGPI PSMIRKTRK QKYFYRGRLD  WDENTSAGRY VRENCKPLRR YLTSEAEHH QLFDLIESML EYEPKRLTL GEALQHPFFA  RLRAEPPNKL WDSSRDISR</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.**

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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.

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Purification:

One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).

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Purity:

> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

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Grade:

custom-made

## Target Details

Target:	CLK2
Alternative Name:	CLK2 ( <a href="#">CLK2 Products</a> )
Background:	<p>Dual specificity protein kinase CLK2 (EC 2.7.12.1) (CDC-like kinase 2),FUNCTION: Dual specificity kinase acting on both serine/threonine and tyrosine-containing substrates. Phosphorylates serine- and arginine-rich (SR) proteins of the spliceosomal complex. May be a constituent of a network of regulatory mechanisms that enable SR proteins to control RNA splicing and can cause redistribution of SR proteins from speckles to a diffuse nucleoplasmic distribution. Acts as a suppressor of hepatic gluconeogenesis and glucose output by repressing PPARGC1A transcriptional activity on gluconeogenic genes via its phosphorylation. Phosphorylates PPP2R5B thereby stimulating the assembly of PP2A phosphatase with the PPP2R5B-AKT1 complex leading to dephosphorylation of AKT1. Phosphorylates: PTPN1, SRSF1 and SRSF3. Regulates the alternative splicing of tissue factor (F3) pre-mRNA in endothelial cells. Phosphorylates PAGE4 at several serine and threonine residues and this phosphorylation attenuates the ability of PAGE4 to potentiate the transcriptional activator activity of JUN (PubMed:28289210). {ECO:0000269 PubMed:10480872, ECO:0000269 PubMed:19168442, ECO:0000269 PubMed:28289210, ECO:0000269 PubMed:8910305, ECO:0000269 PubMed:9637771}.</p>
Molecular Weight:	60.1 kDa
UniProt:	<a href="#">P49760</a>
Pathways:	<a href="#">Regulation of Carbohydrate Metabolic Process</a>

## 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</p>

## Application Details

	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 <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months