

# Datasheet for ABIN3084566 **NEK3 Protein (AA 1-506) (Strep Tag)**



## Overview

Quantity:	250 μg
Target:	NEK3
Protein Characteristics:	AA 1-506
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This NEK3 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details	
Brand:	AliCE®
Sequence:	MDDYMVLRMI GEGSFGRALL VQHESSNQMF AMKEIRLPKS FSNTQNSRKE AVLLAKMKHP
	NIVAFKESFE AEGHLYIVME YCDGGDLMQK IKQQKGKLFP EDMILNWFTQ MCLGVNHIHK
	KRVLHRDIKS KNIFLTQNGK VKLGDFGSAR LLSNPMAFAC TYVGTPYYVP PEIWENLPYN
	NKSDIWSLGC ILYELCTLKH PFQANSWKNL ILKVCQGCIS PLPSHYSYEL QFLVKQMFKR
	NPSHRPSATT LLSRGIVARL VQKCLPPEII MEYGEEVLEE IKNSKHNTPR KKTNPSRIRI
	ALGNEASTVQ EEEQDRKGSH TDLESINENL VESALRRVNR EEKGNKSVHL RKASSPNLHR
	RQWEKNVPNT ALTALENASI LTSSLTAEDD RGGSVIKYSK NTTRKQWLKE TPDTLLNILK
	NADLSLAFQT YTIYRPGSEG FLKGPLSEET EASDSVDGGH DSVILDPERL EPGLDEEDTD
	FEEEDDNPDW VSELKKRAGW QGLCDR
	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 posttranslational 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:	NEK3
Alternative Name:	NEK3 (NEK3 Products)
Background:	Serine/threonine-protein kinase Nek3 (EC 2.7.11.1) (HSPK 36) (Never in mitosis A-related kinase
	3) (NimA-related protein kinase 3),FUNCTION: Protein kinase which influences neuronal
	morphogenesis and polarity through effects on microtubules. Regulates microtubule
	acetylation in neurons. Contributes to prolactin-mediated phosphorylation of PXN and VAV2.
	Implicated in prolactin-mediated cytoskeletal reorganization and motility of breast cancer cells
	through mechanisms involving RAC1 activation and phosphorylation of PXN and VAV2.
	{ECO:0000269 PubMed:15618286, ECO:0000269 PubMed:17297458}.
Molecular Weight:	57.7 kDa
UniProt:	P51956
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

Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months