Datasheet for ABIN3134411

NEK1 Protein (AA 1-1203) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	NEK1
Protein Characteristics:	AA 1-1203
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This NEK1 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MEKYVRLQKI GEGSFGKAVL VKSTEDGRHY VIKEINISRM SDKERQESRR EVAVLANMKH PNIVQYKESF EENGSLYIVM DYCEGGDLFK RINAQKGALF QEDQILDWFV QICLALKHVH DRKILHRDIK SQNIFLTKDG TVQLGDFGIA RVLNSTVELA RTCIGTPYYL SPEICENKPY NNKSDIWALG CVLYELCTLK HAFEAGNMKN LVLKIISGSF PPVSPHYSYD LRSLLSQLFK RNPRDRPSVN SILEKGFIAK RIEKFLSPQL IAEEFCLKTL SKFGPQPLPG KRPASGQGVS SFVPAQKITK PAAKYGVPLT YKKYGDKKLL EKKPPPKHKQ AHQIPVKKMN SGEERKKMSE EAAKKRRLEF IEKEKKQKDQ IRFLKAEQMK RQEKQRLERI NRAREQGWRN VLRAGGSGEV KASFFGIGGA VSPSPCSPRG QYEHYHAIFD QMQRLRAEDN EARWKGGIYG RWLPERQKGH LAVERANQVE EFLQRKREAM QNKARAEGHV VYLARLRQIR LQNFNERQQI KAKLRGENKE ADGTKGQEAT EETDMRLKKM ESLKAQTNAR AAVLKEQLER KRKEAYEREK KVWEEHLVAR VKSSDVPLPL ELLETGGSPS KQQVKPVISV TSALKEVGLD GSLTDTQEEE MEKSNSAISS

KREILRRLNE NLKAQEDEKE KQHHSGSCET VGHKDEREYE TENAISSDRK KWEMGGQLVI PLDAVTLDTS FSATEKHTVG EVIKLDSNGS PRKVWGKNPT DSVLKILGEA ELQLQTELLE NTSFKSEVYA EEENYKPLLT EEENLQCISK EINPSATVDS TETKSPKFTE VSPQMSEGNV EEPDDLETEV LQEPSSTHTD GSLPPVLNDV WTREKEAAKE TELEDKVAVQ QSEVCEDRIP GNVDQSCKDQ RDPAVDDSPQ SGCDVEKSVQ PESIFQKVVH SKDLNLVQAV HCSPEEPIPI RSHSDSPPKT KSKNSLLIGL STGLFDANNP KMLRTCSLPD LSKLFRTLMD VPTVGDVHQD SLEIDELEDE PIKEGPSDSE DTVFEETDTD LQELQASMEQ LLREQPGDEY SEEEESVLKS SDVEQTARGT DAPDEEDNPS SESALNEEWH SDNSDAETTS ECEYDSVFNH LEELRLHLEQ EMGFEKFFEV YEKVKAIHED EDENIEICST IVENILGNEH QHLYAKILHL VMADGAYQED NDE

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 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!

Product Details

	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:	NEK1
Alternative Name:	Nek1 (NEK1 Products)
Background:	Serine/threonine-protein kinase Nek1 (EC 2.7.11.1) (Never in mitosis A-related kinase 1) (NimA-related protein kinase 1),FUNCTION: Phosphorylates serines and threonines, but also appears to possess tyrosine kinase activity (PubMed:1382974). Involved in DNA damage checkpoint control and for proper DNA damage repair (PubMed:18843199). In response to injury that includes DNA damage, NEK1 phosphorylates VDAC1 to limit mitochondrial cell death (By similarity). May be implicated in the control of meiosis (PubMed:1382974). Involved in cilium assembly (By similarity). {ECO:0000250|UniProtKB:Q96PY6, ECO:0000269|PubMed:1382974, ECO:0000269|PubMed:18843199}.
Molecular Weight:	136.7 kDa
UniProt:	P51954

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.

Application Details

	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