Datasheet for ABIN7549675

NEK7 Protein (NEK7) (AA 1-302) (His tag)

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Overview

Quantity:	1 mg
Target:	NEK7
Protein Characteristics:	AA 1-302
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This NEK7 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat NEK7 Protein expressed in mammalien cells.
Sequence:	MDEQSQGMQG PPVPQFQPQK ALRPDMGYNT LANFRIEKKI GRGQFSEVYR AACLLDGVPV ALKKVQIFDL MDAKARADCI KEIDLLKQLN HPNVIKYYAS FIEDNELNIV LELADAGDLS RMIKHFKKQK RLIPERTVWK YFVQLCSALE HMHSRRVMHR DIKPANVFIT ATGVVKLGDL GLGRFFSSKT TAAHSLVGTP YYMSPERIHE NGYNFKSDIW SLGCLLYEMA ALQSPFYGDK MNLYSLCKKI EQCDYPPLPS DHYSEELRQL VNMCINPDPE KRPDVTYVYD VAKRMHACTA SS **Sequence without tag. The proposed Purification-Tag is based on experiences 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 to order protein - from design to production - by highly experienced protein experts.

Product Details

	• Protein expressed in mammalien cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • 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. If you are not interested in a full length protein, please contact us for individual protein fragments. 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.
Purity:	> 90 % as determined by Bis-Tris Page, Western Blot
Grade:	custom-made

Target Details

Target:	NEK7
Alternative Name:	NEK7 (NEK7 Products)
Background:	Serine/threonine-protein kinase Nek7 (EC 2.7.11.34) (Never in mitosis A-related kinase 7) (NimA-related protein kinase 7),FUNCTION: Protein kinase which plays an important role in mitotic cell cycle progression (PubMed:17101132, PubMed:31409757, PubMed:19941817). Required for microtubule nucleation activity of the centrosome, robust mitotic spindle formation and cytokinesis (PubMed:17586473, PubMed:19414596, PubMed:31409757, PubMed:19941817, PubMed:26522158). Phosphorylates EML4 at 'Ser-146', promoting its dissociation from microtubules during mitosis which is required for efficient chromosome congression (PubMed:31409757). Phosphorylates RPS6KB1 (By similarity). Acts as an essential activator of the NLRP3 inflammasome assembly independently of its kinase activity (PubMed:26642356, PubMed:36442502). Acts by unlocking NLRP3 following NLRP3 tranlocation into the microtubule organizing center (MTOC), relieving NLRP3 autoinhibition and promoting formation of the NLRP3:PYCARD complex, and activation of CASP1 (PubMed:26642356, PubMed:31189953, PubMed:36442502). Serves as a cellular switch that enforces mutual exclusivity of the inflammasome response and cell division: interaction with NEK9 prevents interaction with NLRP3 and activation of the inflammasome during mitosis

Target Details

	(PubMed:26642356, PubMed:31189953). {ECO:0000250|UniProtKB:D3ZBE5, ECO:0000269|PubMed:17101132, ECO:0000269|PubMed:17586473, ECO:0000269|PubMed:19414596, ECO:0000269|PubMed:19941817, ECO:0000269|PubMed:26522158, ECO:0000269|PubMed:26642356, ECO:0000269|PubMed:31189953, ECO:0000269|PubMed:31409757, ECO:0000269|PubMed:36442502}.
Molecular Weight:	34.6 kDa
UniProt:	Q8TDX7
Pathways:	Inflammasome

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.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months