

Datasheet for ABIN3091493

KIAA1009 (KIAA1009) (AA 1-1403) protein (Strep Tag)



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1 Image

Overview

Quantity:	1 mg
Target:	KIAA1009
Protein Characteristics:	AA 1-1403
Origin:	Human
Source:	Tobacco (<i>Nicotiana tabacum</i>)
Protein Type:	Recombinant
Purification tag / Conjugate:	Strep Tag
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence: MANCSQEELD EEFQFMKEL SDDSFENSDK TARQSKKEMK KKDTVPWWIT EDDFKDDGLL
GTNVSYLKTK KTSQPVMEIE EESAELIQFL KSSGTSLLST DSLETNELVV SELNHSSLGV
GLDTLEEQEE KEQFFARLEK GLTSSIDYSR LNKELDSNDS THFKALHSNQ ANAELTDDEH
ENESKHEELA ENYSDDFEDE YVGAPLTTKD EEMPSKENS SKISVVPKQE EEKTGMLANV
VLLDSLDSVA EVNLDEQDKI TPKPRCLPEM TENEMTGTGV SYGQSSSDVE ALHQAYCHIA
HSLGDEDKQK IESNTVEDIK SSVKGHPQEN EENSKNISTM ESDLPTVEEL MKPIRIDSFG
ISGFDLQPVSEKVAERKET EFFSSLPLKM NPNILSQDSQ HVNLFFDKND ENVILQKTTN
ESMENS CPQV TEVTATEEHV DKMYLNILRK KITVNSSSLS QDDKINKTYR SQLSSEEEGA
VMGKQVPYKK ARSAPLLKR KPQSGLYASV RSSGYGKPSS PLKMFSTLEK KTSEDIISKSK
NLR SISTSNQ PRKKEILSGT KLIKPAALDK PAHKTESCLS TRKXSENPTD TDSCIQFQTD
SLGYCGENKE KLLMFKRVRQ EAEDKWRGAQ ALIEQIKATF SEKEKELENK LEELKKQKEK
ELFKLNQDNY ILQAKLSSFE ETNKKQRWLH FGEAADPVTG EKLKQIQKEI QEQTLLQGY

QQENERLYNQ VKDLQEQNKK NEERMFKENQ SLFSEVASLK EQMHKSRFLS QVVEDSEPTR
NQNFTDLLAE LRMAQKEKDS LLEDIKRLKQ DKQALEVDFE KMKKERDQAK DQIAYVTGEK
LYEIKILEET HKQEISRLQK RLQWYAENQE LLDKDALRLR EANEEIEKLK LEIEKLKAES
GNPSIRQKIR LKDKAADAKK IQDLERQVKE MEGILKRRYP NSLPALILAA SAAGDTV DKN
TVEFMEKRIK KLEADLEGKD EDAKSLRTM EQQFQKMKIQ YEQRLEQQEQ LLACKLNQHD
SPRIKALEKE LDDIKEAHQI TVRNLEAEID VLKHQNAELD VKKNDKDDDED FQSIEFQVEQ
AHAKAKLVRL NEELAACKRE IQDLSKTVER LQKDRRMMLS NQNSKGREEM SAKRAK KDVL
HSSKGNANSF PGTLD SKLYQ PHTFTDSHVS EVLQENYRLK NELEGLISEK NELKMKSEAV
MNQFENSMRR VKEDTAAHIA SLKASHQREI EKLLCQNAVE NSSSKVAELN RKIATQEVLI
RHFQSQVNEL QSKQESLVVS EVREEILQKE ITKLLEELRE AKENHTPEMK HFVGLLEKKIK
QMEMRHAQRE QELQQIIQQT HQVVETE QNK EVEKWKRLAQ LKNRELEKFR TELDSILDVL
RELHRQGVVV PVAFADEMNA PEY

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 by multi-step, protein-specific process to ensure correct folding and modification.
- 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 will ensure that you receive a correctly folded 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

Product Details

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 in several dilutions and is measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): <ol style="list-style-type: none">1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE.2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

Target Details

Target:	KIAA1009
Alternative Name:	CEP162 (KIAA1009 Products)
Background:	Centrosomal protein of 162 kDa (Cep162) (Protein QN1 homolog),FUNCTION: Required to promote assembly of the transition zone in primary cilia. Acts by specifically recognizing and binding the axonemal microtubule. Localizes to the distal ends of centrioles before ciliogenesis and directly binds to axonemal microtubule, thereby promoting and restricting transition zone formation specifically at the cilia base. Required to mediate CEP290 association with microtubules. {ECO:0000269 PubMed:23644468}.
Molecular Weight:	161.9 kDa
UniProt:	Q5TB80

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. If you have a special request, please contact us.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: Unlimited (if stored properly)



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process