

Datasheet for ABIN3082509

KIF3B Protein (AA 1-747) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	KIF3B
Protein Characteristics:	AA 1-747
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This KIF3B protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AlIcE®
Sequence:	<p>MSKLGSSSESV RVVVRCPMN GKEKAASYDK VVDVDVKLGQ VSVKNPKGTA HEMPKTFTFD</p> <p>AVYDWNKQF ELYDETFRPL VDSVLQGFNG TIFAYGQTGT GKTYTMEGIR GDPEKRGVIP</p> <p>NSFDHIFTHI SRSQNQQYLV RASYLEIYQE EIRDLLSKDQ TKRLELKERP DTGVVVKDLS</p> <p>SFVTKSVKEI EHV MNVGNQN RSVGATNMNE HSSRSHAFV ITIECSEVGL DGENHIRVGK</p> <p>LNLVDLAGSE RQAKTGAQGE RLKEATKINL SLSALGNVIS ALVDGKSTHI PYRDSKLTRL</p> <p>LQDSLGGNAK TVMVANVGPA SYNVEETLTT LRYANRAKNI KKNKPRVNEDP KDALLREFQE</p> <p>EIARLKAQLE KRSIGRRKRR EKRREGGGSG GGGEEEEEEG EEEEEEGDDK DDYWREQQEK</p> <p>LEIEKRAIVE DHSLVAEEKM RLLKEKEKKM EDLRREKDAA EMLGAKIKAM ESKLLVGGKN</p> <p>IVDHTNEQQK ILEQKRQEIA EQKRREIEI QQMESRDEET LELKETYSYL QQEVDIKTKK</p> <p>LKKLFSKLQA VKAEIHDLQE EHIKERQELE QTQNELTREL KLKHLIENF IPLEEKSKIM</p> <p>NRAFFDEEED HWKLHPITRL ENQQMMKRPV SAVGYKRPLS QHARMSMMIR PEARYRAENI</p>

VLLLEDMPSR TTRDYEGPAI APKVQAALDA ALQDEDEIQV DASSFESTAN KKSKARPKSG
RKSGSSSSSS GTPASQLYPQ SRGLVPK

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!

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®).

Product Details

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

Grade: custom-made

Target Details

Target: KIF3B

Alternative Name: KIF3B ([KIF3B Products](#))

Background: Kinesin-like protein KIF3B (HH0048) (Microtubule plus end-directed kinesin motor 3B) [Cleaved into: Kinesin-like protein KIF3B, N-terminally processed],FUNCTION: Microtubule-based molecular motor that transport intracellular cargos, such as vesicles, organelles and protein complexes. Uses ATP hydrolysis to generate force to bind and move along the microtubule (By similarity). Plays a role in cilia formation (PubMed:32386558). Involved in photoreceptor integrity and opsin trafficking in rod photoreceptors (PubMed:32386558). Transports vesicles containing N-methyl-D-aspartate (NMDA) receptor subunit GRIN2A into neuronal dendrites (By similarity). {ECO:0000250|UniProtKB:Q61771, ECO:0000269|PubMed:32386558}.

Molecular Weight: 85.1 kDa

UniProt: [O15066](#)

Pathways: [Hedgehog Signaling, M Phase](#)

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!

Application Details

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