

Datasheet for ABIN3091812

CLASP1 Protein (AA 1-1538) (Strep Tag)



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Overview

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|-------------------------------|---|
| Quantity: | 1 mg |
| Target: | CLASP1 |
| Protein Characteristics: | AA 1-1538 |
| Origin: | Human |
| Source: | Tobacco (Nicotiana tabacum) |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This CLASP1 protein is labelled with Strep Tag. |
| Application: | ELISA, Western Blotting (WB), SDS-PAGE (SDS) |

Product Details

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| Sequence: | MEPRMESCLA QVLQKDVGKR LQVGQELIDY FSDKQKSADL EHDQTMLDKL VDGLATSWVN SSNYKVLLG MDILSALVTR LQDRFKAQIG TVLPSLIDRL GDAKDSVREQ DQTLKKIMD QAANPQYVWD RMLGGFKHKN FRTREGICLC LIATLNASGA QTLTLSKIVP HICNLLGDPN SQVRDAAINS LVEIYRHVGE RVRADLSKKG LPQSRLNVIF TKFDEVQKSG NMIQSANDKN FDDSDVDGN RPSSASSTSS KAPPSSRRNV GMGTTRRLGS STLGSKSSAA KEGAGAVDEE DFIKAFDDVP VVQIYSSRD L EESINKIREI LSDDKHDWEQ RVNALKKIRS LLAGAAEYD NFFQHLRLLD GAFKLSAKDL RSQVVREACI TLGHLSSVLG NKFDHGAEAI MPTIFNLIPN SAKIMATSGV VAVRLIIRHT HIPRLIPVIT SNCTSKSVAV RRRCFEFLDL LLQEWQTHSL ERHISVLAET IKKGIHDADS EARIEARKCY WGFHSHFSRE AEHLYHTLES SYQKALQSHL KNSDSIVSLP QSDRSSSSSQ ESLNRPLSAK RSPTGSTTSR ASTVSTKSVS TTGSLQRSRS DIDVNAAASA KSKVSSSSGT TPFSSAAALP PGSYASLGRI RTRRQSSGSA TNVASTPDNR GRSRAKVVSQ SQRSRSANPA GAGSRSSSPG KLLGSGYGGL TGGSSRGPPV TPSSEKRSKI |
|-----------|---|

PRSQGCSRET SPNRIGLARS SRIPRPSMSQ GCSRDTRES SRDTSPARGF PPLDRFGLGQ
PGRIPGSVNA MRVLSTSTDL EAAVADALKK PVRRRYEPYG MYSDDDANS ASSVCERSY
GSRNGGIPHY LRQTEDVAEV LNHCASSNWS ERKEGLLGLQ NLLKSQRTLS RVELKRLCEI
FTRMFADPHS KRVFSMFLET LVDFIIHKD DLQDWLFVLL TQLLKMGAD LLGSVQAKVQ
KALDVTRDSF PFDQQFNILM RFIVDQTQTP NLKVKVAILK YIESLARQMD PTDFVNSSET
RLAVSRIITW TTEPKSSDVR KAAQIVLISL FELNTPEFTM LLGALPKTFQ DGATKLLHNNH
LKNSSNTSVG SPSNTIGRTP SRHTSSRTSP LTSPTNCSHG GLSPSRLWGW SADGLAKHPP
PFSQPNSIPT APSHKALRRS YSPSMLDYDT ENLNSEEIYS SLRGVTEAIE KFSFRSQEDL
NEPIKRDGKK ECDIVSRDGG AASPATEGRG GSEVEGGRTA LDNKTSLNT QPPRAFPGPR
ARDYNPYPYS DAINTYDKTA LKEAVFDDDM EQLRDVPIDH SDLVADLLKE LSNHNERVEE
RKGALLELLK ITREDSLGWV EEHFKTILL LLETLGDKDH SIRALALRVL REILRNQPAR
FKNYAELTIM KTLAHDKSH KEVVRAAEEA ASTLASSIHP EQCIKVLCP IQTADYPINL
AAIKMQTKVV ERIAKESLLQ LLVDIIPGLL QGYDNTESSV RKASVFCLVA IYSVIGEDLK
PHLAQLTGSK MKLLNLYIKR AQTTNSNSSS SSDVSTHS

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.

Product 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!

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.

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| Purification: | Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): 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

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|-------------------|---|
| Target: | CLASP1 |
| Alternative Name: | CLASP1 (CLASP1 Products) |
| Background: | CLIP-associating protein 1 (Cytoplasmic linker-associated protein 1) (Multiple asters homolog 1) (Protein Orbit homolog 1) (hOrbit1),FUNCTION: Microtubule plus-end tracking protein that promotes the stabilization of dynamic microtubules. Involved in the nucleation of noncentrosomal microtubules originating from the trans-Golgi network (TGN). Required for the polarization of the cytoplasmic microtubule arrays in migrating cells towards the leading edge of the cell. May act at the cell cortex to enhance the frequency of rescue of depolymerizing microtubules by attaching their plus-ends to cortical platforms composed of ERC1 and |

Target Details

PHLDB2. This cortical microtubule stabilizing activity is regulated at least in part by phosphatidylinositol 3-kinase signaling. Also performs a similar stabilizing function at the kinetochore which is essential for the bipolar alignment of chromosomes on the mitotic spindle. {ECO:0000269|PubMed:11290329, ECO:0000269|PubMed:12837247, ECO:0000269|PubMed:15631994, ECO:0000269|PubMed:16866869, ECO:0000269|PubMed:16914514, ECO:0000269|PubMed:17543864}.

Molecular Weight: 169.5 kDa

UniProt: [Q7Z460](#)

Pathways: [Microtubule Dynamics](#), [M Phase](#), [Maintenance of Protein Location](#)

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

Handling

Storage Comment: Store at -80°C.

Expiry Date: Unlimited (if stored properly)

Images



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