Datasheet for ABIN3092246

Dynamin 1 Protein (DNM1) (AA 1-864) (Strep Tag)

1 Image

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Overview

Quantity:	1 mg
Target:	Dynamin 1 (DNM1)
Protein Characteristics:	AA 1-864
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This Dynamin 1 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

Product Details

Sequence:	MGNRGMEDLI PLVNRLQDAF SAIGQNADLD LPQIAVVGGQ SAGKSSVLEN FVGRDFLPRG SGIVTRRPLV LQLVNATTEY AEFLHCKGKK FTDFEEVRLE IEAETDRVTG TNKGISPVPI NLRVYSPHVL NLTLVDLPGM TKVPVGDQPP DIEFQIRDML MQFVTKENCL ILAVSPANSD LANSDALKVA KEVDPQGQRT IGVITKLDLM DEGTDARDVL ENKLLPLRRG YIGVVNRSQK DIDGKKDITA ALAAERKFFL SHPSYRHLAD RMGTPYLQKV LNQQLTNHIR DTLPGLRNKL QSQLLSIEKE VEEYKNFRPD DPARKTKALL QMVQQFAVDF EKRIEGSGDQ IDTYELSGGA RINRIFHERF PFELVKMEFD EKELRREISY AIKNIHGIRT GLFTPDMAFE TIVKKQVKKI REPCLKCVDM VISELISTVR QCTKKLQQYP RLREEMERIV TTHIREREGR TKEQVMLLID IELAYMNTNH EDFIGFANAQ QRSNQMNKKK TSGNQDEILV IRKGWLTINN IGIMKGGSKE YWFVLTAENL SWYKDDEEKE KKYMLSVDNL KLRDVEKGFM SSKHIFALFN TEQRNVYKDY RQLELACETQ EEVDSWKASF LRAGVYPERV GDKEKASETE ENGSDSFMHS MDPQLERQVE TIRNLVDSYM AIVNKTVRDL MPKTIMHLMI NNTKEFIFSE LLANLYSCGD QNTLMEESAE

QAQRRDEMLR MYHALKEALS IIGDINTTTV STPMPPPVDD SWLQVQSVPA GRRSPTSSPT PQRRAPAVPP ARPGSRGPAP GPPPAGSALG GAPPVPSRPG ASPDPFGPPP QVPSRPNRAP PGVPSRSGQA SPSRPESPRP PFDL

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 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.

Product Details

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

Target:	Dynamin 1 (DNM1)
Alternative Name:	DNM1 (DNM1 Products)
Background:	Dynamin-1 (EC 3.6.5.5) (Dynamin) (Dynamin I),FUNCTION: Catalyzes the hydrolysis of GTP and utilizes this energy to mediate vesicle scission and participates in many forms of endocytosis, such as clathrin-mediated endocytosis or synaptic vesicle endocytosis as well as rapid endocytosis (RE) (PubMed:8910402, PubMed:20428113, PubMed:15703209, PubMed:9362482, PubMed:29668686, PubMed:8101525). Associates to the membrane, through lipid binding, and self-assembles into rings and stacks of interconnected rings through oligomerization to form a helical polymer around the vesicle membrane leading to constriction of invaginated coated pits around their necks (PubMed:7877694, PubMed:9922133, PubMed:30069048). Self-assembly of the helical polymer induces membrane tubules narrowing until the polymer reaches a length sufficient to trigger GTP hydrolysis (PubMed:19084269). Depending on the curvature imposed on the tubules, membrane detachment from the helical polymer upon GTP hydrolysis can cause spontaneous hemifission followed by complete fission (PubMed:19084269). May play a role in regulating early stages of clathrin-mediated endocytosis in non-neuronal cells through its activation by dephosphorylation via the signaling downstream of EGFR (PubMed:29668686). Controls vesicle size at a step before fission, during formation of membrane pits, at hippocampal synapses (By similarity). Controls plastic adaptation of the synaptic vesicle recycling machinery to high levels of activity (By similarity). Mediates rapid endocytosis (RE), a Ca(2+)-dependent and clathrin- and K(+)-independent process in chromaffin cells (By similarity). Microtubule-associated force-producing protein involved in producing microtubule bundles and able to bind and hydrolyze GTP (By similarity). Through its interaction with

Target Details

	DNAJC6, acts during the early steps of clathrin-coated vesicle (CCV) formation (PubMed:12791276). {ECO:0000250|UniProtKB:P39053, ECO:0000250|UniProtKB:Q08DF4, ECO:0000269|PubMed:12791276, ECO:0000269|PubMed:15703209, ECO:0000269|PubMed:19084269, ECO:0000269|PubMed:20428113, ECO:0000269|PubMed:29668686, ECO:0000269|PubMed:30069048, ECO:0000269|PubMed:7877694, ECO:0000269|PubMed:8101525, ECO:0000269|PubMed:8910402, ECO:0000269|PubMed:9362482, ECO:0000269|PubMed:9922133}.
Molecular Weight:	97.4 kDa
UniProt:	Q05193
Pathways:	Toll-Like Receptors Cascades, CXCR4-mediated Signaling Events, Thromboxane A2 Receptor Signaling

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

Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

Images

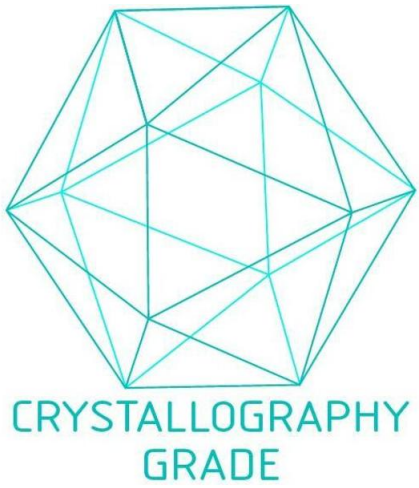

Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process