

Datasheet for ABIN3092245

DYNLT1 Protein (AA 1-113) (Strep Tag)



Overview

| Quantity: | 1 mg |
|-------------------------------|--|
| Target: | DYNLT1 |
| Protein Characteristics: | AA 1-113 |
| Origin: | Human |
| Source: | Tobacco (Nicotiana tabacum) |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This DYNLT1 protein is labelled with Strep Tag. |
| Application: | SDS-PAGE (SDS), ELISA, Western Blotting (WB) |
| Product Details | |
| Seguence. | MEDYOAAFET AEVV/DEVSNI VKEAIESAIG GNAYOHSKVN OWTTNIVVEOT I SOI TKI GKP |

| Sequence: | MEDYQAAEET AFVVDEVSNI VKEAIESAIG GNAYQHSKVN QWTTNVVEQT LSQLTKLGKP |
|-----------|---|
| | FKYIVTCVIM QKNGAGLHTA SSCFWDSSTD GSCTVRWENK TMYCIVSAFG LSI |

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 posttranslational 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®). |
| Purity: | > 80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC). |
| | |
| Target Details | |
| Target: | DYNLT1 |
| Alternative Name: | DYNLT1 (DYNLT1 Products) |
| Background: | Dynein light chain Tctex-type 1 (Protein CW-1) (T-complex testis-specific protein 1 |
| | homolog), FUNCTION: Acts as one of several non-catalytic accessory components of the |
| | cytoplasmic dynein 1 complex that are thought to be involved in linking dynein to cargos and to |
| | adapter proteins that regulate dynein function. Cytoplasmic dynein 1 acts as a motor for the |
| | intracellular retrograde motility of vesicles and organelles along microtubules. Binds to |

transport cargos and is involved in apical cargo transport such as rhodopsin-bearing vesicles in polarized epithelia. May also be a accessory component of axonemal dynein., FUNCTION: Plays a role in neuronal morphogenesis, the function is independent of cytoplasmic dynein and seems to be coupled to regulation of the actin cytoskeleton by enhancing Rac1 activity. The function in neurogenesis may be regulated by association with a G-protein beta-gamma dimer. May function as a receptor-independent activator of heterotrimeric G-protein signaling, the activation appears to be independent of a nucleotide exchange. Plays a role in regulating neurogenesis, inhibits the genesis of neurons from precursor cells during cortical development presumably by antagonizing ARHGEF2. Involved in the regulation of mitotic spindle orientation (By similarity). Unrelated to the role in retrograde microtubule-associated movement may play a role in the dimerization of cytoplasmic proteins/domains such as for ACVR2B. Binds to the cytoplasmic domain of ACVR2B and, in vitro, inhibits ACVR2B signaling (PubMed:27502274). (ECO:0000250, ECO:0000269|PubMed:27502274}., FUNCTION: (Microbial infection) Is involved in intracellular targeting of D-type retrovirus gag polyproteins to the cytoplasmic assembly site. (ECO:0000269|PubMed:18647839).

Molecular Weight:

12.5 kDa

UniProt:

P63172

Pathways:

Regulation of G-Protein Coupled Receptor Protein 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:

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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) |