

## Datasheet for ABIN3135441

# PACSIN1 Protein (AA 1-441) (Strep Tag)



Go to Product page

| ()     | ve  | r\/i  | ۱۸/    |
|--------|-----|-------|--------|
| $\cup$ | V C | 1 / 1 | <br>٧V |

| Quantity:                     | 250 μg   |
|-------------------------------|--|
| Target:                       | PACSIN1  |
| Protein Characteristics:      | AA 1-441   |
| Origin:                       | Mouse  |
| Source:                       | Cell-free protein synthesis (CFPS)               |
| Protein Type:                 | Recombinant                                      |
| Purification tag / Conjugate: | This PACSIN1 protein is labelled with Strep Tag. |
| Application:                  | ELISA, Western Blotting (WB), SDS-PAGE (SDS)     |

| Product Details |   |
|-----------------|---|
| Brand:          | AliCE®  |
| Sequence:       | MSGSYDEASE EITDSFWEVG NYKRTVKRID DGHRLCNDLM SCVQERAKIE KAYAQQLTDW                           |
|                 | AKRWRQLIEK GPQYGSLERA WGAMMTEADK VSELHQEVKN SLLNEDLEKV KNWQKDAYHK                           |
|                 | QIMGGFKETK EAEDGFRKAQ KPWAKKMKEL EAAKKAYHLA CKEERLAMTR EMNSKTEQSV                           |
|                 | TPEQQKKLVD KVDKCRQDVQ KTQEKYEKVL EDVGKTTPQY MEGMEQVFEQ CQQFEEKRLV                           |
|                 | FLKEVLLDIK RHLNLAENSS YMHVYRELEQ AIRGADAQED LRWFRSTSGP GMPMNWPQFE                           |
|                 | EWNPDLPHTT AKKEKQPKKA EGATLSNATG AVESTSQAGD RGSVSSYDRG QTYATEWSDD                           |
|                 | ESGNPFGGNE ANGGANPFED DAKGVRVRAL YDYDGQEQDE LSFKAGDELT KLGEEDEQGW                           |
|                 | CRGRLDSGQL GLYPANYVEA I   |
|                 | 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:       | > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).                                 |
| Grade:        | custom-made  |

## Target Details

| Target:             | PACSIN1   |
|---------------------|---|
| Alternative Name:   | Pacsin1 (PACSIN1 Products)  |
| Background:         | Protein kinase C and casein kinase substrate in neurons protein 1 (Syndapin-1),FUNCTION:          |
|                     | Binds to membranes via its F-BAR domain and mediates membrane tubulation. Plays a role in         |
|                     | the reorganization of the microtubule cytoskeleton via its interaction with MAPT, this decreases  |
|                     | microtubule stability and inhibits MAPT-induced microtubule polymerization. Plays a role in       |
|                     | cellular transport processes by recruiting DNM1, DNM2 and DNM3 to membranes. Plays a role         |
|                     | in the reorganization of the actin cytoskeleton and in neuron morphogenesis via its interaction   |
|                     | with COBL and WASL, and by recruiting COBL to the cell cortex. Plays a role in the regulation of  |
|                     | neurite formation, neurite branching and the regulation of neurite length. Required for normal    |
|                     | synaptic vesicle endocytosis, this process retrieves previously released neurotransmitters to     |
|                     | accommodate multiple cycles of neurotransmission. Required for normal excitatory and              |
|                     | inhibitory synaptic transmission. {ECO:0000269 PubMed:11082044,                                   |
|                     | ECO:0000269 PubMed:20404169, ECO:0000269 PubMed:21926968,   |
|                     | ECO:0000269 PubMed:23035120}.   |
| Molecular Weight:   | 50.6 kDa  |
| UniProt:            | Q61644  |
| 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.  Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol <b>Might differ depending on protein.</b> |
| Handling Advice: | Avoid repeated freeze-thaw cycles.   |
| Storage:         | -80 °C   |
| Storage Comment: | Store at -80°C.  |
| Expiry Date:     | 12 months  |