

Datasheet for ABIN3106209 **SUCNR1 Protein (AA 1-334) (Strep Tag)**



Go to Product page

| _ | | | | | | |
|---|-------|-------------|----|----|-------------|-----|
| | V | \triangle | r۱ | /1 | \triangle | Λ/ |
| | ' V ' | | ΙV | | | v v |

| Quantity: | 250 μg |
|-------------------------------|---|
| Target: | SUCNR1 |
| Protein Characteristics: | AA 1-334 |
| Origin: | Human |
| Source: | Cell-free protein synthesis (CFPS) |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This SUCNR1 protein is labelled with Strep Tag. |
| Application: | ELISA, SDS-PAGE (SDS), Western Blotting (WB) |

| Product Details | |
|------------------|---|
| Brand: | AliCE® |
| Sequence: | MLGIMAWNAT CKNWLAAEAA LEKYYLSIFY GIEFVVGVLG NTIVVYGYIF SLKNWNSSNI |
| | YLFNLSVSDL AFLCTLPMLI RSYANGNWIY GDVLCISNRY VLHANLYTSI LFLTFISIDR YLIIKYPFRE |
| | HLLQKKEFAI LISLAIWVLV TLELLPILPL INPVITDNGT TCNDFASSGD PNYNLIYSMC LTLLGFLIPL |
| | FVMCFFYYKI ALFLKQRNRQ VATALPLEKP LNLVIMAVVI FSVLFTPYHV MRNVRIASRL |
| | GSWKQYQCTQ VVINSFYIVT RPLAFLNSVI NPVFYFLLGD HFRDMLMNQL RHNFKSLTSF |
| | SRWAHELLLS FREK |
| | 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: | SUCNR1 |

Target Details SUCNR1 (SUCNR1 Products) Alternative Name: Background: Succinate receptor 1 (G-protein coupled receptor 91) (P2Y purinoceptor 1-like), FUNCTION: G protein-coupled receptor for succinate able to mediate signaling through Gq/GNAQ or Gi/GNAI second messengers depending on the cell type and the processes regulated (By similarity) (PubMed:15141213, PubMed:34133934, PubMed:23770096). Succinate-SUCNR1 signaling serves as a link between metabolic stress, inflammation and energy homeostasis (PubMed:18820681, PubMed:34133934). In macrophages, plays a range of immune-regulatory roles. During inflammation, succinate-SUCNR1 signaling may act as an anti-inflammatory mediator or boost inflammation depending on the inflammatory status of cells (By similarity). Hyperpolarizes M2 macrophages versus M1 phenotype through Gq signaling by regulating the transcription of genes involoved in immune function (PubMed:34133934). In activated M1 macrophages, plays a pro-inflammatory role in response to LPS (By similarity). Expressed in dendritic cells, where it is involved in the sensing of immunological danger and enhances immunity. Mediates succinate triggered intracelleular calcium mobilization, induces migratory responses and acts in synergy with Toll-like receptor ligands for the production of proinflammatory cytokines as well as an enhancement of antigen-specific activation of helper T cells (PubMed:18820681). In the small intestine, mediates the activation of tuft cells by dietary succinate and triggers type 2 immunity (By similarity). In adipocytes, plays an important role in the control of energy metabolism. In response to succinate, controls leptin expression in an AMPK-JNK-CEBPA-dependent as well as circadian clock-regulated manner (By similarity). In muscle tissue, is expressed in non-muscle cells and coordinates muscle remodeling in response to the succinate produced during exercise training in a paracrine manner (By similarity). In retina, acts as a mediator of vessel growth during retinal development. In response to succinate, regulates the production of angiogenic factors, including VEGF, by retinal ganglion neurons (By similarity). {ECO:0000250|UniProtKB:Q6IYF9, ECO:0000250|UniProtKB:Q99MT6, ECO:0000269|PubMed:15141213, ECO:0000269|PubMed:18820681, ECO:0000269|PubMed:23770096, ECO:0000269|PubMed:34133934}. Molecular Weight: 38.7 kDa UniProt: O9BXA5 **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

Application Details

Handling Advice:

Storage Comment:

Storage:

Expiry Date:

| Application Detail | S | |
|--------------------|---|--|
| | 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 Might differ depending on protein. | |
| | | |

Avoid repeated freeze-thaw cycles.

-80 °C

Store at -80°C.

12 months