

### Datasheet for ABIN7563058

# Septin 4 Protein (SEPT4) (AA 1-478) (His tag)



#### Overview

| Quantity:                     | 1 mg                                            |
|-------------------------------|-------------------------------------------------|
| Target:                       | Septin 4 (SEPT4)                                |
| Protein Characteristics:      | AA 1-478                                        |
| Origin:                       | Mouse                                           |
| Source:                       | HEK-293 Cells                                   |
| Protein Type:                 | Recombinant                                     |
| Purification tag / Conjugate: | This Septin 4 protein is labelled with His tag. |
| Application:                  | Western Blotting (WB), SDS-PAGE (SDS)           |

#### **Product Details**

| Purpose:  | Custom-made recombinat Septin4 Protein expressed in mammalien cells.                        |
|-----------|---------------------------------------------------------------------------------------------|
| Sequence: | MDHSLGWQGN SVPEDGTEAG IKHFLEDSSD DAELSKFVKD FPGSEPYHSA ESKTRVARPQ                           |
|           | ILEPRPQSPD LCDDDVEFRG SLWPQPSDSQ QYFSAPAPLS PSSRPRSPWG KLDPYDSSED                           |
|           | DKEYVGFATL PNQVHRKSVK KGFDFTLMVA GESGLGKSTL VNSLFLTDLY RDRKLLGAEE                           |
|           | RIMQTVEITK HAVDIEEKGV RLRLTIVDTP GFGDAVNNTE CWKPVAEYID QQFEQYFRDE                           |
|           | SGLNRKNIQD NRVHCCLYFI SPFGHGLRPL DVEFMKALHQ RVNIVPILAK ADTLTPPEVD                           |
|           | RKKCKIREEI EHFGIKIYQF PDCDSDEDED FKLQDQALKE SIPFAVIGSN TVVEARGRRV                           |
|           | RGRLYPWGIV EVENPGHCDF VKLRTMLVRT HMQDLKDVTR ETHYENYRAQ CIQSMTRLVV                           |
|           | KERNRNKLTR ESGTDFPIPA VPPGTDPETE KLIREKDEEL RRMQEMLHKI QRQMKETH <b>Sequence</b>             |
|           | without tag. The proposed Purification-Tag is based on experiences 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.                                                  |
|           |                                                                                             |

#### **Product Details**

#### Characteristics:

Key Benefits:

- Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalien cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- 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.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

Grade:

custom-made

#### **Target Details**

Target:

Septin 4 (SEPT4)

Alternative Name:

Septin4 (SEPT4 Products)

Background:

Septin-4 (Bradeion beta) (Brain protein H5) (CE5B3 beta) (Cell division control-related protein 2) (hCDCREL-2) (Peanut-like protein 2),FUNCTION: Filament-forming cytoskeletal GTPase (Probable). Pro-apoptotic protein involved in LGR5-positive intestinal stem cell and Paneth cell expansion in the intestines, via its interaction with XIAP (PubMed:30389919). May also play a role in the regulation of cell fate in the intestine (PubMed:30389919). Positive regulator of apoptosis involved in hematopoietic stem cell homeostasis, via its interaction with XIAP (PubMed:20952537). Negative regulator of repair and hair follicle regeneration in response to injury, due to inhibition of hair follicle stem cell proliferation, potentially via its interaction with XIAP (PubMed:23788729). Plays an important role in male fertility and sperm motility (PubMed:15737930, PubMed:15737931). During spermiogenesis, essential for the establishment of the annulus (a fibrous ring structure connecting the midpiece and the principal piece of the sperm flagellum) which is a requisite for the structural and mechanical integrity of the sperm (PubMed:15737930, PubMed:15737931). Involved in the migration of cortical

| neurons and the formation of neuron leading processes during embryonic development    |
|---------------------------------------------------------------------------------------|
| (PubMed:20181826). Required for dopaminergic metabolism in presynaptic autoreceptors, |
| potentially via activity as a presynaptic scaffold protein (PubMed:17296554).         |
| {ECO:0000269 PubMed:15737930, ECO:0000269 PubMed:15737931,                            |
| ECO:0000269 PubMed:17296554, ECO:0000269 PubMed:20181826,                             |
| ECO:0000269 PubMed:20952537, ECO:0000269 PubMed:23788729,                             |
| ECO:0000269 PubMed:30389919, ECO:0000305}.                                            |
| 54.9 kDa                                                                              |

Molecular Weight:

UniProt:

| Application De | tai | IS |
|----------------|-----|----|
|----------------|-----|----|

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.

Restrictions: For Research Use only

P28661

## Handling

| Format:          | Liquid                                                           |
|------------------|------------------------------------------------------------------|
| Buffer:          | The buffer composition is at the discretion of the manufacturer. |
| Handling Advice: | Avoid repeated freeze-thaw cycles.                               |
| Storage:         | -80 °C                                                           |
| Storage Comment: | Store at -80°C.                                                  |
| Expiry Date:     | 12 months                                                        |