

# Datasheet for ABIN7545937 **Septin 4 Protein (SEPT4) (AA 1-478) (His tag)**



## Overview

Quantity:	1 mg
Target:	Septin 4 (SEPT4)
Protein Characteristics:	AA 1-478
Origin:	Human
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:	MDRSLGWQGN SVPEDRTEAG IKRFLEDTTD DGELSKFVKD FSGNASCHPP EAKTWASRPQ
	VPEPRPQAPD LYDDDLEFRP PSRPQSSDNQ QYFCAPAPLS PSARPRSPWG KLDPYDSSED
	DKEYVGFATL PNQVHRKSVK KGFDFTLMVA GESGLGKSTL VNSLFLTDLY RDRKLLGAEE
	RIMQTVEITK HAVDIEEKGV RLRLTIVDTP GFGDAVNNTE CWKPVAEYID QQFEQYFRDE
	SGLNRKNIQD NRVHCCLYFI SPFGHGLRPL DVEFMKALHQ RVNIVPILAK ADTLTPPEVD
	HKKRKIREEI EHFGIKIYQF PDCDSDEDED FKLQDQALKE SIPFAVIGSN TVVEARGRRV
	RGRLYPWGIV EVENPGHCDF VKLRTMLVRT HMQDLKDVTR ETHYENYRAQ CIQSMTRLVV
	KERNRNKLTR ESGTDFPIPA VPPGTDPETE KLIREKDEEL RRMQEMLHKI QKQMKENY <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 (By similarity). May also play a role in the regulation of cell fate in the intestine (By similarity). Positive regulator of apoptosis involved in hematopoietic stem cell homeostasis, via its interaction with XIAP (By similarity). 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 (By similarity). Plays an important role in male fertility and sperm motility (By similarity). 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 (By similarity). Involved in the migration of cortical neurons and the formation of neuron leading processes during embryonic development (By similarity).

Required for dopaminergic metabolism in presynaptic autoreceptors, potentially via activity as a presynaptic scaffold protein (By similarity). {ECO:0000250|UniProtKB:P28661, ECO:0000305}., FUNCTION: [Isoform ARTS]: Required for the induction of cell death mediated by TGF-beta and possibly by other apoptotic stimuli (PubMed:11146656, PubMed:15837787). Induces apoptosis through binding and inhibition of XIAP resulting in significant reduction in XIAP levels, leading to caspase activation and cell death (PubMed:15029247). Mediates the interaction between BCL2 and XIAP, thereby positively regulating the ubiquitination and degradation of BCL2 and promoting apoptosis (PubMed:29020630). {ECO:0000269|PubMed:11146656, ECO:0000269|PubMed:15029247, ECO:0000269|PubMed:15837787, ECO:0000269|PubMed:29020630}.

Molecular Weight:

55.1 kDa

UniProt:

043236

## **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.

Restrictions:

For Research Use only

## 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