

# Datasheet for ABIN7555558 SMUG1 Protein (AA 1-270) (His tag)



#### Overview

Quantity:	1 mg
Target:	SMUG1
Protein Characteristics:	AA 1-270
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SMUG1 protein is labelled with His tag.

#### **Product Details**

Purpose:	Custom-made recombinant SMUG1 Protein expressed in mammalian cells.
Sequence:	MPQAFLLGSI HEPAGALMEP QPCPGSLAES FLEEELRLNA ELSQLQFSEP VGIIYNPVEY
	AWEPHRNYVT RYCQGPKEVL FLGMNPGPFG MAQTGVPFGE VSMVRDWLGI VGPVLTPPQE
	HPKRPVLGLE CPQSEVSGAR FWGFFRNLCG QPEVFFHHCF VHNLCPLLFL APSGRNLTPA
	ELPAKQREQL LGICDAALCR QVQLLGVRLV VGVGRLAEQR ARRALAGLMP EVQVEGLLHP
	SPRNPQANKG WEAVAKERLN ELGLLPLLLK Sequence without tag. The proposed
	Purification-Tag is based on experiences with the expression system, a different complexit
	of the protein could make another tag necessary. In case you have a special request, please
	contact us.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different
	isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:

- · Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalian 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, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade:

custom-made

### **Target Details**

Target:	SMUG1
Alternative Name:	SMUG1 (SMUG1 Products)
Background:	Single-strand selective monofunctional uracil DNA glycosylase (EC 3.2.2),FUNCTION:
	Recognizes base lesions in the genome and initiates base excision DNA repair. Acts as a
	monofunctional DNA glycosylase specific for uracil (U) residues in DNA with a preference for
	single-stranded DNA substrates. The activity is greater toward mismatches (U/G) compared to
	matches (U/A). Excises uracil (U), 5-formyluracil (fU) and uracil derivatives bearing an oxidized
	group at C5 [5-hydroxyuracil (hoU) and 5-hydroxymethyluracil (hmU)] in ssDNA and dsDNA, but
	not analogous cytosine derivatives (5-hydroxycytosine and 5-formylcytosine), nor other
	oxidized bases. The activity is damage-specific and salt-dependent. The substrate preference is
	the following: ssDNA > dsDNA (G pair) = dsDNA (A pair) at low salt concentration, and dsDNA
	(G pair) > dsDNA (A pair) > ssDNA at high salt concentration. {ECO:0000269 PubMed:10074426,
	ECO:0000269 PubMed:11526119, ECO:0000269 PubMed:12161446,
	ECO:0000269 PubMed:12718543}.
Molecular Weight:	29.9 kDa
UniProt:	Q53HV7

## **Target Details**

Pathways:	DNA Damage Repair
Application Details	
Application Notes:	We expect the protein to work for functional studies. 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