

# Datasheet for ABIN7546213 SMYD5 Protein (AA 1-418) (His tag)



## Overview

Quantity:	1 mg
Target:	SMYD5
Protein Characteristics:	AA 1-418
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SMYD5 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

## **Product Details**

Purpose:	Custom-made recombinat SMYD5 Protein expressed in mammalien cells.
Sequence:	MAASMCDVFS FCVGVAGRAR VSVEVRFVSS AKGKGLFATQ LIRKGETIFV ERPLVAAQFL
	WNALYRYRAC DHCLRALEKA EENAQRLTGK PGQVLPHPEL CTVRKDLHQN CPHCQVMYCS
	AECRLAATEQ YHQVLCPGPS QDDPLHPLNK LQEAWRSIHY PPETASIMLM ARMVATVKQA
	KDKDRWIRLF SQFCNKTANE EEEIVHKLLG DKFKGQLELL RRLFTEALYE EAVSQWFTPD
	GFRSLFALVG TNGQGIGTSS LSQWVHACDT LELKPQDREQ LDAFIDQLYK DIEAATGEFL
	NCEGSGLFVL QSCCNHSCVP NAETSFPENN FLLHVTALED IKPGEEICIS YLDCCQRERS
	RHSRHKILRE NYLFVCSCPK CLAEADEPNV TSEEEEEEEE EEEGEPEDAE LGDEMTDV Sequence
	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.
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:		
9		

#### Alternative Name:

## Background:

SMYD5

SMYD5 (SMYD5 Products)

Histone-lysine N-trimethyltransferase SMYD5 (EC 2.1.1.372) (Protein NN8-4AG) (Retinoic acidinduced protein 15) (SET and MYND domain-containing protein 5) ([histone H4]-lysine20 N-trimethyltransferase SMYD5),FUNCTION: Histone methyltransferase that specifically trimethylates 'Lys-20' of histone H4 to form trimethylated histone H4 lysine 20 (H4K20me3) which represents a specific tag for epigenetic transcriptional repression (By similarity). In association with the NCoR corepressor complex, is involved in the repression of toll-like receptor 4 (TLR4)-target inflammatory genes in macrophages by catalyzing the formation of H4K20me3 at the gene promoters (By similarity). Plays an important role in embryonic stem (ES) cell self-renewal and differentiation (By similarity). Promotes ES cell maintenance by silencing differentiation genes through deposition of H4K20me3 marks (By similarity). Maintains genome stability of ES cells during differentiation through regulation of heterochromatin formation and repression of endogenous repetitive DNA elements by depositing H4K20me3 marks (PubMed:28951459). (ECO:0000250|UniProtKB:Q3TYX3, ECO:0000269|PubMed:28951459).

# **Target Details**

Molecular Weight:	47.3 kDa
UniProt:	Q6GMV2

# **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