

# Datasheet for ABIN7546180 SMYD2A Protein (AA 1-433) (His tag)



### Overview

| Quantity:                     | 1 mg  |
|-------------------------------|---|
| Target:                       | SMYD2A  |
| Protein Characteristics:      | AA 1-433                                      |
| Origin:                       | Human   |
| Source:                       | HEK-293 Cells                                 |
| Protein Type:                 | Recombinant                                   |
| Purification tag / Conjugate: | This SMYD2A protein is labelled with His tag. |

| Product Details |   |
|-----------------|---|
| Purpose:        | Custom-made recombinant SMYD2 Protein expressed in mammalian cells.                             |
| Sequence:       | MRAEGLGGLE RFCSPGKGRG LRALQPFQVG DLLFSCPAYA YVLTVNERGN HCEYCFTRKE                               |
|                 | GLSKCGRCKQ AFYCNVECQK EDWPMHKLEC SPMVVFGENW NPSETVRLTA RILAKQKIHP                               |
|                 | ERTPSEKLLA VKEFESHLDK LDNEKKDLIQ SDIAALHHFY SKHLGFPDND SLVVLFAQVN                               |
|                 | CNGFTIEDEE LSHLGSAIFP DVALMNHSCC PNVIVTYKGT LAEVRAVQEI KPGEEVFTSY                               |
|                 | IDLLYPTEDR NDRLRDSYFF TCECQECTTK DKDKAKVEIR KLSDPPKAEA IRDMVRYARN                               |
|                 | VIEEFRRAKH YKSPSELLEI CELSQEKMSS VFEDSNVYML HMMYQAMGVC LYMQDWEGAL                               |
|                 | QYGQKIIKPY SKHYPLYSLN VASMWLKLGR LYMGLEHKAA GEKALKKAIA IMEVAHGKDH                               |
|                 | PYISEIKQEI ESH 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.                   |
| 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.                                       |

#### **Product Details**

#### 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:

Target:

custom-made

SMYD2A

#### **Target Details**

| -                 |  |
|-------------------|--|
| Alternative Name: | SMYD2 (SMYD2A Products)  |
| Background:       | N-lysine methyltransferase SMYD2 (EC 2.1.1) (HSKM-B) (Histone methyltransferase SMYD2)         |
|                   | (EC 2.1.1.354) (Lysine N-methyltransferase 3C) (SET and MYND domain-containing protein         |
|                   | 2),FUNCTION: Protein-lysine N-methyltransferase that methylates both histones and non-         |
|                   | histone proteins, including p53/TP53 and RB1. Specifically trimethylates histone H3 'Lys-4'    |
|                   | (H3K4me3) in vivo. The activity requires interaction with HSP90alpha. Shows even higher        |
|                   | methyltransferase activity on p53/TP53. Monomethylates 'Lys-370' of p53/TP53, leading to       |
|                   | decreased DNA-binding activity and subsequent transcriptional regulation activity of p53/TP53. |
|                   | Monomethylates RB1 at 'Lys-860'. {ECO:0000269 PubMed:17108971,                                 |

ECO:0000269|PubMed:17805299, ECO:0000269|PubMed:18065756, ECO:0000269|PubMed:20870719, ECO:0000269|PubMed:21782458,

#### Molecular Weight:

49.7 kDa

ECO:0000269|PubMed:21880715}.

UniProt:

Q9NRG4

## **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   |