

**Anti-SMYD3 Picoband Antibody**  
**Catalog # ABO12579****Specification**

---

**Anti-SMYD3 Picoband Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	<a href="#">Q9H7B4</a>
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Histone-lysine N-methyltransferase SMYD3(SMYD3) detection. Tested with WB, IHC-P in Human.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-SMYD3 Picoband Antibody - Additional Information**

**Gene ID** 64754

**Other Names**

Histone-lysine N-methyltransferase SMYD3, 2.1.1.43, SET and MYND domain-containing protein 3, Zinc finger MYND domain-containing protein 1, SMYD3, ZMYND1, ZNFN3A1

**Calculated MW**

49097 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat<br><br>Western blot, 0.1-0.5 µg/ml, Human<br>

**Subcellular Localization**

Cytoplasm . Nucleus . Mainly cytoplasmic when cells are arrested at G0/G1. Accumulates in the nucleus at S phase and G2/M.

**Tissue Specificity**

Expressed in skeletal muscles and testis. Overexpressed in a majority of colorectal and hepatocellular carcinomas. .

**Protein Name**

Histone-lysine N-methyltransferase SMYD3

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human SMYD3 (388-428aa

QAMKNLRLAFDIMRVTHGREHSLIEDLILLLEECDANIRAS), different from the related mouse sequence by one amino acid.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins.

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Anti-SMYD3 Picoband Antibody - Protein Information**

**Name** SMYD3

**Synonyms** ZMYND1, ZNFN3A1

**Function**

Histone methyltransferase. Specifically methylates 'Lys-4' of histone H3, inducing di- and tri-methylation, but not monomethylation (PubMed: [15235609](http://www.uniprot.org/citations/15235609), PubMed: [22419068](http://www.uniprot.org/citations/22419068)). Also methylates 'Lys-5' of histone H4 (PubMed: [22419068](http://www.uniprot.org/citations/22419068)). Plays an important role in transcriptional activation as a member of an RNA polymerase complex (PubMed: [15235609](http://www.uniprot.org/citations/15235609)). Binds DNA containing 5'-CCCTCC-3' or 5'-GAGGGG-3' sequences (PubMed: [15235609](http://www.uniprot.org/citations/15235609)).

**Cellular Location**

Cytoplasm. Nucleus. Note=Mainly cytoplasmic when cells are arrested at G0/G1. Accumulates in the nucleus at S phase and G2/M.

**Tissue Location**

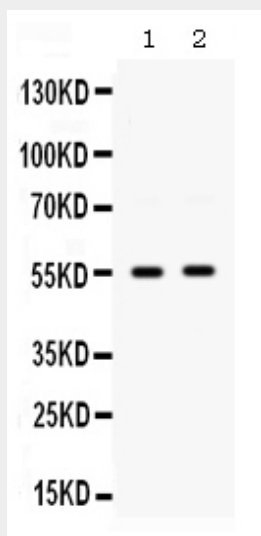
Expressed in skeletal muscles and testis. Overexpressed in a majority of colorectal and hepatocellular carcinomas.

**Anti-SMYD3 Picoband Antibody - Protocols**

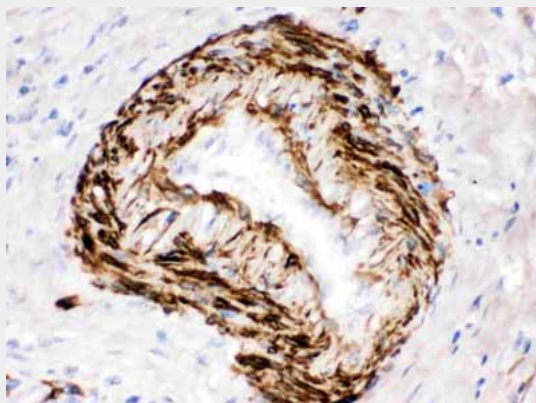
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-SMYD3 Picoband Antibody - Images**



Western blot analysis of SMYD3 expression in HELA whole cell lysates (lane 1) and COLO320 whole cell lysates (lane 2). SMYD3 at 55KD was detected using rabbit anti- SMYD3 Antigen Affinity purified polyclonal antibody (Catalog # ABO12579) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method .



SMYD3 was detected in paraffin-embedded sections of human intestinal cancer tissues using rabbit anti- SMYD3 Antigen Affinity purified polyclonal antibody (Catalog # ABO12579) at 1 µg/mL. The immunohistochemical section was developed using SABC method .

#### Anti-SMYD3 Picoband Antibody - Background

SET and MYND domain-containing protein 3 is a protein that in humans is encoded by the SMYD3 gene. The International Radiation Hybrid Mapping Consortium mapped the SMYD3 gene to chromosome 1. This gene encodes a histone methyltransferase which functions in RNA polymerase II complexes by an interaction with a specific RNA helicase. Multiple transcript variants encoding different isoforms have been found for this gene.