

Anti-SMYD3 Picoband Antibody

Catalog # ABO12579

Product Information

Application	WB, IHC-P
Primary Accession	Q9H7B4
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.

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
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Human, By Heat Western blot, 0.1-0.5 μ g/ml, Human
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. .
Source	Eukaryota
Protein Name	Histone-lysine N-methyltransferase SMYD3
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human SMYD3 (388-428aa QAMKNLRLAFDIMRVTHGREHSLIEDLILLEECDANIRAS), 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.

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 , PubMed: 22419068). Also methylates 'Lys-5' of histone H4 (PubMed: 22419068). Plays an important role in transcriptional activation as a member of an RNA polymerase complex (PubMed: 15235609). Binds DNA containing 5'-CCCTCC-3' or 5'-GAGGGG-3' sequences (PubMed: 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.

Background

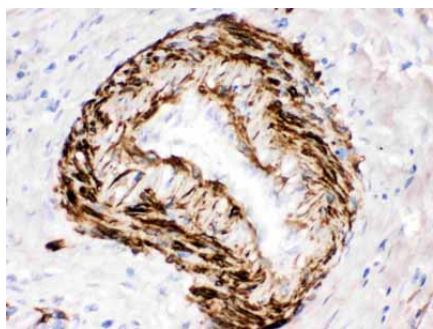
SET and MYND domain-containing protein 3 is a protein that in humans is encoded by the SMYD3 gene. The International Radiation Hybrid Mapping Consortium mapped the SMYD3 gene to chromosome 1. This gene encodes a histone methyltransferase which functions in RNA polymerase II complexes by an interaction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

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 .



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