

For Research Use Only

SMYD3 Polyclonal antibody

Catalog Number: 12011-1-AP

Featured Product

7 Publications



Basic Information

Catalog Number:

12011-1-AP

Size:

300 µg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG2624

GenBank Accession Number:

BC031010

GeneID (NCBI):

64754

UNIPROT ID:

Q9H7B4

Full Name:

SET and MYND domain containing 3

Calculated MW:

428aa, 49 kDa; 369aa, 42 kDa

Observed MW:

42-45 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:1000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

IF/ICC 1:50-1:500

Applications

Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

Cited Applications:

WB, IHC, ChIP

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat

Positive Controls:

WB: mouse brain tissue, COLO 320 cells, HeLa cells, HepG2 cells

IP: COLO 320 cells,

IHC: human breast cancer tissue, human colon cancer tissue

IF/ICC: HEK-293 cells,

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Background Information

SMYD3, also name as ZMYND1 and ZNFN3A1, belongs to the histone-lysine methyltransferase family. It is a histone methyltransferase that plays an important role in transcriptional regulation in human carcinogenesis. It can specifically methylate histone H3 at lysine 4 and activate the transcription of a set of downstream genes, including several oncogenes (e.g., N-myc, Crkl, Wnt10b, RIZ and hTERT) and genes involved in the control of cell cycle. (PMID: 20957523). It plays an important role in transcriptional activation as a member of an RNA polymerase complex. SMYD3 is frequently overexpressed in different types of cancer cells. It functions as a coactivator of Era and potentiates Era activity in response to ligand. SMYD3 as a new coactivator for ER-mediated transcription, providing a possible link between SMYD3 overexpression and breast cancer. (PMID: 19509295) The common variable number of tandem repeats polymorphism in SMYD3 is a susceptibility factor for some types of human cancer. (PMID: 16155568) . SMYD3 exists some isoforms with MV 49, 43 and 30 kDa.

Notable Publications

| Author | Pubmed ID | Journal | Application |
|------------------|-----------|----------------------|-------------|
| Xiaomei Liu | 29130966 | Cell Physiol Biochem | WB |
| Fen Long | 34094832 | Acta Pharm Sin B | WB |
| Ewud Agborbesong | 38892227 | Int J Mol Sci | ChIP |

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

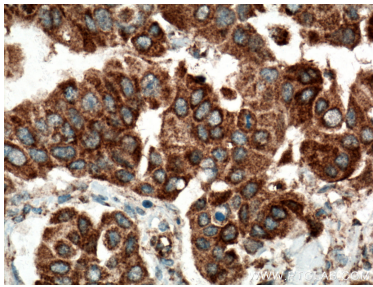
T: 4006900926

E: Proteintech-CN@ptglab.com

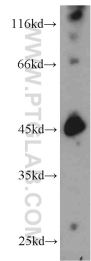
W: ptgcn.com

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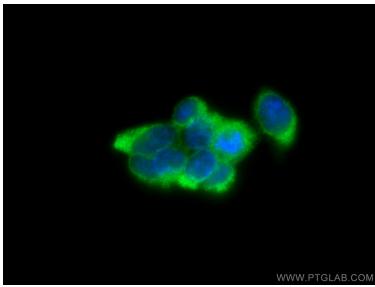
Selected Validation Data



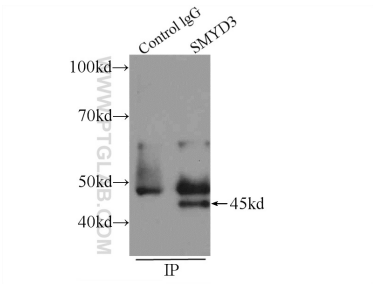
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 12011-1-AP (SMYD3 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



mouse brain tissue were subjected to SDS PAGE followed by western blot with 12011-1-AP (SMYD3 antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (-20°C Ethanol) fixed HEK-293 cells using SMYD3 antibody (12011-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L).



IP result of anti-SMYD3 (IP:12011-1-AP, 4ug; Detection:12011-1-AP 1:500) with COLO 320 cells lysate 1280ug.