

SMYD3 Polyclonal Antibody

Catalog number: 12011-1-AP

Size: 20 µg/150 µl

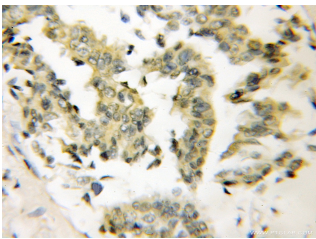
Source: Rabbit

Isotype: IgG

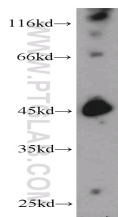
Synonyms:

SMYD3; bA74P14.1, FLJ21080,

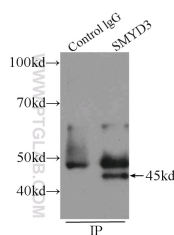
SMYD3, ZMYND1, ZNFN3A1



Immunohistochemical of paraffin-embedded human breast cancer using 12011-1-AP(SMYD3 antibody) at dilution of 1:50 (under 10x lens)



mouse brain tissue were subjected to SDS PAGE followed by western blot with 12011-1-AP(SMYD3 antibody) at dilution of 1:800



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

Background

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).

Applications

| | |
|--------------------------|---|
| Tested applications: | ELISA, IHC, IP, WB |
| Cited applications: | WB |
| Species specificity: | Human, Mouse, Rat; other species not tested. |
| Cited species: | Human |
| Calculated SMYD3 MW: | 428aa, 49 kDa; 369aa, 42 kDa |
| Observed SMYD3 MW: | 42-45kd |
| Positive WB detected in | Mouse brain tissue, COLO 320 cells, HeLa cells, HepG2 cells |
| Positive IP detected in | COLO 320 cells |
| Positive IHC detected in | Human breast cancer tissue |
| Recommended dilution: | WB: 1:200-1:2000 |
| | IP: 1:200-1:2000 |
| | IHC: 1:20-1:200 |

Application key: WB = Western blotting, IHC = Immunohistochemistry, IF = Immunofluorescence, IP = Immunoprecipitation

Immunogen information

| | |
|---------------------------|----------------------------------|
| Immunogen: | Ag2624 |
| GenBank accession number: | BC031010 |
| Gene ID (NCBI): | 64754 |
| Full name: | SET and MYND domain containing 3 |

Product information

| | |
|----------------------|---|
| Purification method: | Antigen affinity purification |
| Storage: | PBS with 0.1% sodium azide and 50% glycerol pH 7.3. Store at -20°C. |