

For Research Use Only

SMYD3 Polyclonal antibody

Catalog Number: 12011-1-AP

Featured Product

6 Publications



Basic Information

Catalog Number: 12011-1-AP	GenBank Accession Number: BC031010	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 300 µg/ml by Nanodrop and 267 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 64754	Recommended Dilutions: WB 1:500-1:1000 IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
Source: Rabbit	Full Name: SET and MYND domain containing 3	IHC 1:50-1:500 IF 1:50-1:500
Isotype: IgG	Calculated MW: 428aa,49 kDa; 369aa,42 kDa	
Immunogen Catalog Number: AG2624	Observed MW: 42-45 kDa	

Applications

Tested Applications: IF, IHC, IP, WB, ELISA	Positive Controls:
Cited Applications: IHC, WB	WB : mouse brain tissue, COLO 320 cells, HeLa cells, HepG2 cells
Species Specificity: human, mouse, rat	IP : COLO 320 cells,
Cited Species: human, rat	IHC : human breast cancer tissue, human colon cancer tissue
	IF : 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
Yujia Huang	38191478	Oncogenesis	WB, IHC

Storage

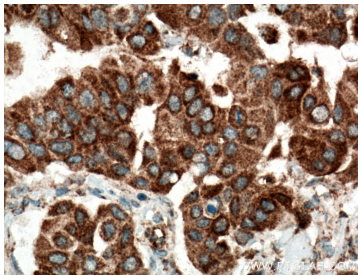
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

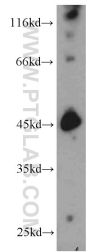
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

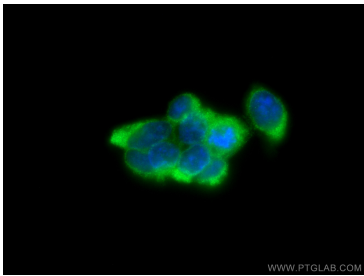
Selected Validation Data



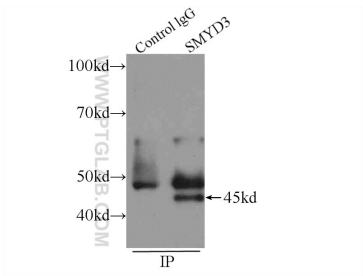
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 12011-1-AP (SMYD3 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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 AffiniPure 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.