

For Research Use Only

# SMYD3 Monoclonal antibody, PBS Only



Catalog Number: 66330-1-PBS

## Basic Information

<b>Catalog Number:</b> 66330-1-PBS	<b>GenBank Accession Number:</b> BC031010	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 1 mg/ml	<b>GeneID (NCBI):</b> 64754	<b>CloneNo.:</b> 1B5C10
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> Q9H7B4	
<b>Isotype:</b> IgG1	<b>Full Name:</b> SET and MYND domain containing 3	
<b>Immunogen Catalog Number:</b> AG2624	<b>Calculated MW:</b> 428aa,49 kDa; 369aa,42 kDa	
	<b>Observed MW:</b> 49 kDa	

## Applications

**Tested Applications:**  
WB, Indirect ELISA, IHC, IF

**Species Specificity:**  
human

## 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). Mainly cytoplasmic when cells are arrested at G0/G1, accumulates in the nucleus at S phase and G2/M (Uniprot).

## Storage

**Storage:**  
Store at -80°C.  
**The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**

**Storage Buffer:**  
PBS Only

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

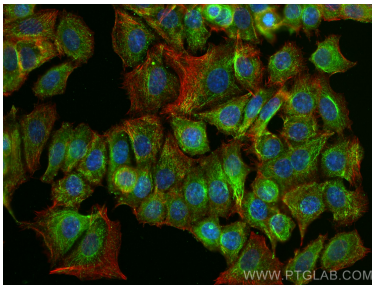
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

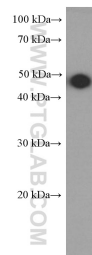
W: [ptgcn.com](http://ptgcn.com)

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

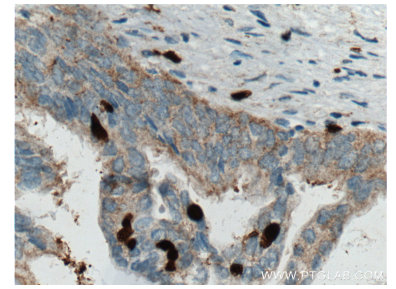
## Selected Validation Data



Immunofluorescent analysis of (-20°C Ethanol) fixed MCF-7 cells using SMYD3 antibody (66330-1-Ig, Clone: 1B5C10) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), (CL594-Phalloidin, red). This data was developed using the same antibody clone with 66330-1-PBS in a different storage buffer formulation.



A431 cells were subjected to SDS PAGE followed by western blot with 66330-1-Ig (SMYD3 Antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66330-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 66330-1-Ig (SMYD3 Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66330-1-PBS in a different storage buffer formulation.