

For Research Use Only

# SMYD2 Polyclonal antibody

Catalog Number: 21290-1-AP

Featured Product

15 Publications



## Basic Information

<b>Catalog Number:</b> 21290-1-AP	<b>GenBank Accession Number:</b> BC098305	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul, Concentration: 700 µg/ml by Nanodrop and 333 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 56950	<b>Recommended Dilutions:</b> WB 1:1000-1:4000 IHC 1:50-1:500 IF 1:50-1:500
<b>Source:</b> Rabbit	<b>Full Name:</b> SET and MYND domain containing 2	
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 433 aa, 50 kDa	
<b>Immunogen Catalog Number:</b> AG15823	<b>Observed MW:</b> 50 kDa	

## Applications

### Tested Applications:

IF, IHC, WB, ELISA

### Cited Applications:

IF, IHC, WB

### Species Specificity:

human, mouse, rat

### Cited Species:

human, rat, mouse

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

### Positive Controls:

WB : C2C12 cell, HEK-293 cells, C2C12 cells, U2OS cells, mouse heart tissue, rat heart tissue

IHC : rat heart tissue,

IF : HeLa cells,

## Background Information

SMYD2, also known as SET and MYND domain containing 2, encodes an enzyme called N-lysine methyltransferase SMYD2, which plays a crucial role in cellular processes, including histone methylation, non-histone protein methylation, cell proliferation and differentiation, DNA repair (PMID: 18065756, PMID: 36191822). Aberrant SMYD2 expression has been linked to various cancers, including colon cancer, lung cancer, and cervical cancer. Smyd2 is strongly expressed in muscle cells with highest expression in the neonatal heart (PMID: 25125178).

## Notable Publications

Author	Pubmed ID	Journal	Application
Libin Yan	31754403	Theranostics	IHC
Haibi Su	36270984	Cell Death Dis	WB
Ying Wang	34015314	Exp Cell Res	WB

## 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

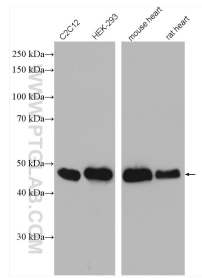
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

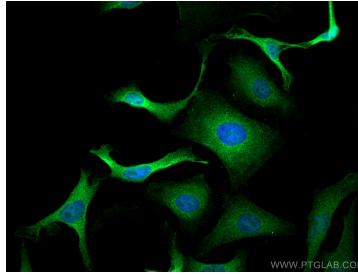
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

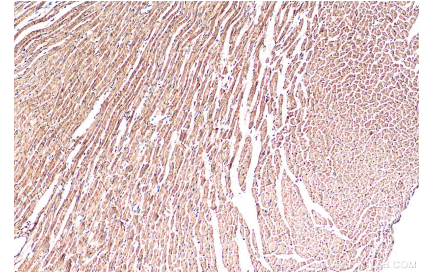
## Selected Validation Data



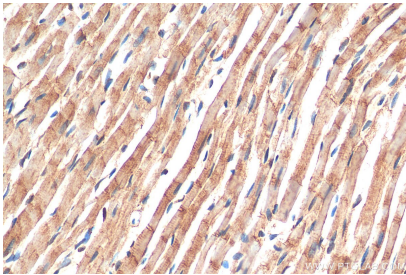
Various lysates were subjected to SDS PAGE followed by western blot with 21290-1-AP (SMYD2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using SMYD2 antibody (21290-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunohistochemical analysis of paraffin-embedded rat heart tissue slide using 21290-1-AP (SMYD2 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded rat heart tissue slide using 21290-1-AP (SMYD2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).