

For Research Use Only

SETDB1 Polyclonal antibody

Catalog Number: 11231-1-AP

Featured Product

41 Publications



Basic Information

Catalog Number:

11231-1-AP

Size:

150ul, Concentration: 700 µg/ml by Nanodrop and 300 µg/ml by Bradford method using BSA as the standard;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG1725

GenBank Accession Number:

BC009362

GeneID (NCBI):

9869

Full Name:

SET domain, bifurcated 1

Calculated MW:

143 kDa

Observed MW:

170 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:2000

IP 0.5-4.0 ug for IP and 1:500-1:2000 for WB

IHC 1:50-1:500

Applications

Tested Applications:

IHC, IP, WB, ELISA

Cited Applications:

ChIP, CoIP, IF, IHC, IP, WB

Species Specificity:

human, mouse, rat

Cited Species:

human, 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: Jurkat cells, PC-3 cells, mouse brain tissue, human testis tissue, MCF-7 cells, HEK-293 cells

IP: MCF-7 cells,

IHC: human lung cancer tissue, human testis tissue

Background Information

SETDB1, also named as ESET, KIAA0067 and KMT1E, belongs to the histone-lysine methyltransferase family. It is a SET domain protein with histone H3-K9-specific methyltransferase activity. H3 'Lys-9' trimethylation is coordinated with DNA methylation and represents a specific tag for epigenetic transcriptional repression by recruiting HP1 (CBX1, CBX3 and/or CBX5) proteins to methylated histones. SETDB1 mainly functions in euchromatin regions, thereby playing a central role in the silencing of euchromatic genes. It probably forms a complex with MBD1 and ATF7IP that represses transcription and couples DNA methylation and histone 'Lys-9' trimethylation. Its activity is dependent on MBD1 and is heritably maintained through DNA replication by being recruited by CAF-1. SETDB1 regulates histone methylation, gene silencing, and transcriptional repression. It has been identified as a target for treatment in Huntington Disease, given that gene silencing and transcription dysfunction likely play a role in the disease pathogenesis. This antibody is a rabbit polyclonal antibody raised against residues near the N terminus of human SETDB1. The calculated molecular weight of SETDB1 is 143 kDa, but the modified SETDB1 protein is about 170 kDa (PMID: 11791185).

Notable Publications

Author	Pubmed ID	Journal	Application
Keli Chen	29158805	J Cancer	chIP
Tiantian Liu	28890329	Biochim Biophys Acta	chIP
Takayuki Hirota	30393076	Dev Cell	WB, IF

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

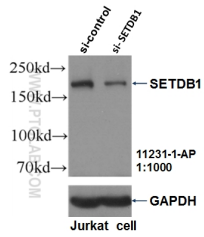
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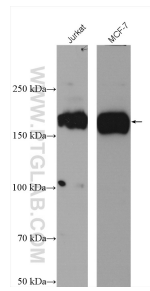
E: proteintech@ptglab.com
W: ptglab.com

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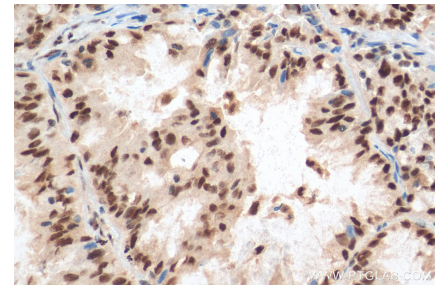
Selected Validation Data



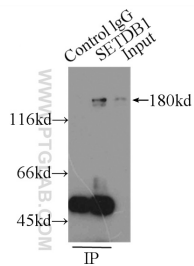
WB result of SETDB1 antibody (11231-1-AP, 1:1000) with si-Control and si-SETDB1 transfected Jurkat cells.



Various lysates were subjected to SDS PAGE followed by western blot with 11231-1-AP (SETDB1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 11231-1-AP (SETDB1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP Result of anti-SETDB1 (IP:11231-1-AP, 3ug; Detection:11231-1-AP 1:1000) with MCF-7 cells lysate 2500ug.