

For Research Use Only

# SETDB1 Recombinant antibody

Catalog Number: 83772-5-RR



## Basic Information

|   |   |   |
|---|---|---|
| <b>Catalog Number:</b><br>83772-5-RR                          | <b>GenBank Accession Number:</b><br>BC009362  | <b>Purification Method:</b><br>Protein A purification |
| <b>Size:</b><br>100ul , Concentration: 750 µg/ml by Nanodrop; | <b>GeneID (NCBI):</b><br>9869                 | <b>CloneNo.:</b><br>240805D7                          |
| <b>Source:</b><br>Rabbit                                      | <b>UNIPROT ID:</b><br>Q15047                  | <b>Recommended Dilutions:</b><br>WB 1:5000-1:50000    |
| <b>Isotype:</b><br>IgG  | <b>Full Name:</b><br>SET domain, bifurcated 1 |   |
| <b>Immunogen Catalog Number:</b><br>AG1725                    | <b>Calculated MW:</b><br>143 kDa              |   |
|   | <b>Observed MW:</b><br>170-180 kDa            |   |

## Applications

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|---|--|
| <b>Tested Applications:</b><br>WB, ELISA    | <b>Positive Controls:</b><br>WB : HEK-293 cells, Jurkat cells, HeLa cells, MCF-7 cells, NIH/3T3 cells, T-47D cells |
| <b>Species Specificity:</b><br>human, mouse |  |

## 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).

## Storage

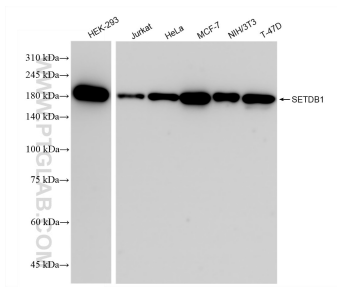
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 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  
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## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 83772-5-RR (SETDB1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.