

For Research Use Only

# SETDB1 Recombinant antibody

Catalog Number: 83772-5-RR



## Basic Information

**Catalog Number:**

83772-5-RR

**Size:**

100ul , Concentration: 750 ug/ml by Nanodrop;

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG1725

**GenBank Accession Number:**

BC009362

**GeneID (NCBI):**

9869

**UNIPROT ID:**

Q15047

**Full Name:**

SET domain, bifurcated 1

**Calculated MW:**

143 kDa

**Observed MW:**

170-180 kDa

**Purification Method:**

Protein A purification

**CloneNo.:**

240805D7

**Recommended Dilutions:**

WB 1:5000-1:50000

## Applications

**Tested Applications:**

WB, ELISA

**Species Specificity:**

human, mouse

**Positive Controls:**

WB : HEK-293 cells, Jurkat cells, HeLa cells, MCF-7 cells, NIH/3T3 cells, T-47D cells

## 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

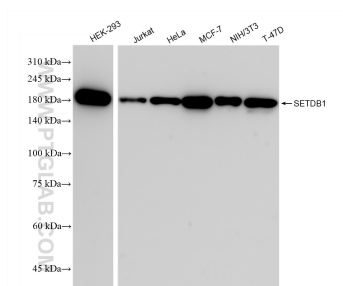
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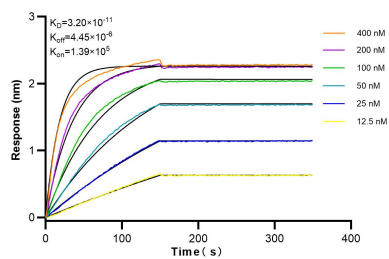
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## Selected Validation Data



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.



Biolayer interferometry (BLI) kinetic assays of 83772-5-RR against Human SETDB1 were performed. The affinity constant is 32 pM.