For Research Use Only

SETDB1 Recombinant antibody

Size:

750 μg/ml

Catalog Number:83772-5-RR



Basic Information

Catalog Number: 83772-5-RR

BC009362

GeneID (NCBI): 9869

GenBank Accession Number:

Source: UNIPROT ID:
Rabbit Q15047
Isotype: Full Name:

gG SET domain, bifurcated 1

Immunogen Catalog Number: Calculated MW: AG1725 143 kDa

Observed MW: 170-180 kDa Purification Method:

Protein A purfication

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:

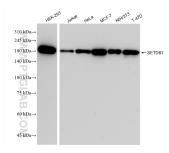
Store at -20°C. Stable for one year after shipment.

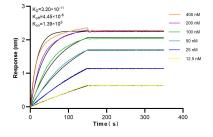
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

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