

For Research Use Only

# SETDB1 Recombinant antibody, PBS Only

Catalog Number: 83772-6-PBS



## Basic Information

Catalog Number:	GenBank Accession Number:	Purification Method:
83772-6-PBS	BC009362	Protein A purification
Concentration:	GeneID (NCBI):	CloneNo.:
1 mg/ml	9869	240805F2
Source:	UNIPROT ID:	
Rabbit	Q15047	
Isotype:	Full Name:	
IgG	SET domain, bifurcated 1	
Immunogen Catalog Number:	Calculated MW:	
AG1725	143 kDa	
	Observed MW:	
	170 kDa	

## Applications

Tested Applications:  
IHC, IF/ICC, FC (Intra), ELISA

Species Specificity:  
human

## 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 -80°C.  
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:  
PBS Only

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

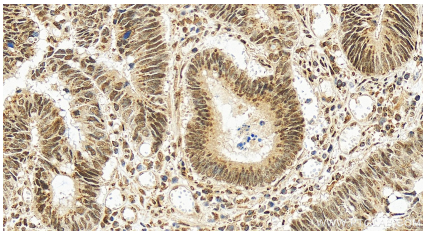
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

W: [ptgcn.com](http://ptgcn.com)

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

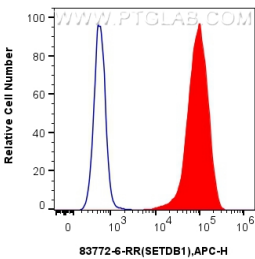
Selected Validation Data



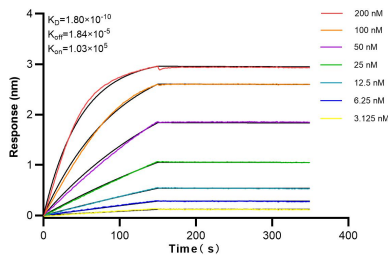
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 83772-6-RR (SETDB1 antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83772-6-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using SETDB1 antibody (83772-6-RR, Clone: 240805F2 ) at dilution of 1:250 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 83772-6-PBS in a different storage buffer formulation.



1x10<sup>6</sup> HeLa cells were intracellularly stained with 0.25 ug SETDB1 Recombinant antibody (83772-6-RR, Clone:240805F2) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011). This data was developed using the same antibody clone with 83772-6-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 83772-6-RR against Human SETDB1 were performed. The affinity constant is 0.18 nM.