

For Research Use Only

SETDB1 Monoclonal antibody

Catalog Number: 66293-1-Ig



Basic Information

Catalog Number: 66293-1-Ig	GenBank Accession Number: BC009362	Purification Method: Protein G purification
Size: 1000 µg/ml	GeneID (NCBI): 9869	CloneNo.: 1H6E5
Source: Mouse	UNIPROT ID: Q15047	Recommended Dilutions: WB 1:20000-1:100000 IHC 1:500-1:2000
Isotype: IgG1	Full Name: SET domain, bifurcated 1	
Immunogen Catalog Number: AG21644	Calculated MW: 143 kDa	
	Observed MW: 170-180 kDa	

Applications

Tested Applications:

IHC, WB, ELISA

Species Specificity:

human, mouse, rat

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 : HeLa cells, HEK-293 cells, human heart tissue, MCF-7 cells, Jurkat cells, HepG2 cells

IHC : human colon tissue, rat liver tissue, rat colon tissue, mouse colon 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. 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

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

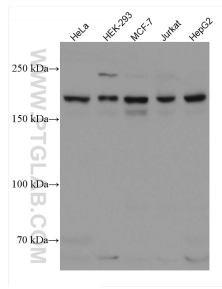
T: 4006900926

E: Proteintech-CN@ptglab.com

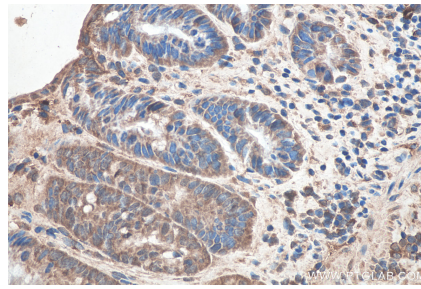
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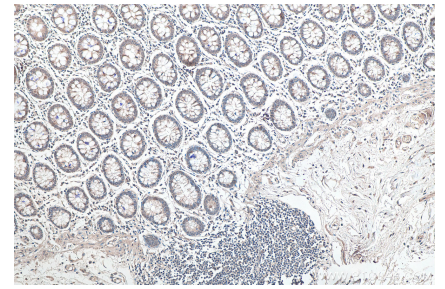
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 66293-1-Ig (SETDB1 antibody) at dilution of 1:100000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse colon tissue slide using 66293-1-Ig (SETDB1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 66293-1-Ig (SETDB1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).