

Datasheet for ABIN1387645
anti-SETDB1 antibody (AA 201-300)[Go to Product page](#)

1 Publication

Overview

Quantity:	100 µL
Target:	SETDB1
Binding Specificity:	AA 201-300
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SETDB1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunoprecipitation (IP), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunocytochemistry (ICC), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human SETDB1
Isotype:	IgG
Cross-Reactivity:	Rat
Predicted Reactivity:	Human,Mouse,Dog,Cow,Sheep,Pig,Horse,Rabbit
Purification:	Purified by Protein A.

Target Details

Target:	SETDB1
---------	--------

Target Details

Alternative Name:	KMT1E/SETDB1 (SETDB1 Products)
Background:	<p>Synonyms: ESET, KG1T, KMT1E, TDRD21, H3-K9-HMTase4, Histone-lysine N-methyltransferase SETDB1, ERG-associated protein with SET domain, Histone H3-K9 methyltransferase 4, H3-K9-HMTase 4, Lysine N-methyltransferase 1E, SET domain bifurcated 1, SETDB1, KIAA0067</p> <p>Background: Histone methyltransferase that specifically trimethylates 'Lys-9' of histone H3. H3 'Lys-9' trimethylation represents a specific tag for epigenetic transcriptional repression by recruiting HP1 (CBX1, CBX3 and/or CBX5) proteins to methylated histones. Mainly functions in euchromatin regions, thereby playing a central role in the silencing of euchromatic genes. H3 'Lys-9' trimethylation is coordinated with DNA methylation. 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 is targeted to histone H3 by TRIM28/TIF1B, a factor recruited by KRAB zinc-finger proteins. Probably forms a corepressor complex required for activated KRAS-mediated promoter hypermethylation and transcriptional silencing of tumor suppressor genes (TSGs) or other tumor-related genes in colorectal cancer (CRC) cells (PubMed:24623306). Also required to maintain a transcriptionally repressive state of genes in undifferentiated embryonic stem cells (ESCs) (PubMed:24623306). Associates at promoter regions of tumor suppressor genes (TSGs) leading to their gene silencing (PubMed:24623306). The SETDB1-TRIM28-ZNF274 complex may play a role in recruiting ATRX to the 3'-exons of zinc-finger coding genes with atypical chromatin signatures to establish or maintain/protect H3K9me3 at these transcriptionally active regions (PubMed:27029610).</p>
Gene ID:	9869
UniProt:	Q15047

Application Details

Application Notes:	WB 1:300-5000
	ELISA 1:500-1000
	IHC-P 1:200-400
	IHC-F 1:100-500
	IF(IHC-P) 1:50-200
	IF(IHC-F) 1:50-200
	IF(ICC) 1:50-200
	IP(1-2 µg)
	ICC 1:100-500

Application Details

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1 µg/µL

Buffer: 0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.

Preservative: ProClin

Precaution of Use: This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.

Storage: 4 °C, -20 °C

Storage Comment: Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Expiry Date: 12 months

Publications

Product cited in: Marco, Kislouk, Tabachnik, Weller, Meiri et al.: "DNA CpG Methylation (5-Methylcytosine) and Its Derivative (5-Hydroxymethylcytosine) Alter Histone Posttranslational Modifications at the Pomc Promoter, Affecting the Impact of Perinatal Diet on ..." in: **Diabetes**, Vol. 65, Issue 8, pp. 2258-67, (2016) ([PubMed](#)).