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anti-SETDB1 antibody (AA 201-300) (Biotin)



Overview

| Quantity: | 100 μL |
|----------------------|--|
| Target: | SETDB1 |
| Binding Specificity: | AA 201-300 |
| Reactivity: | Rat |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Conjugate: | This SETDB1 antibody is conjugated to Biotin |
| Application: | Western Blotting (WB), ELISA, Immunoprecipitation (IP), Immunohistochemistry (Paraffinembedded Sections) (IHC (p)), 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 |
|-------------------|--------------------------------|
| Alternative Name: | KMT1E/SETDB1 (SETDB1 Products) |

Background:

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 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).

Gene ID: 9869
UniProt: 015047

Application Details

Application Notes: WB 1:300-5000

IHC-P 1:200-400

IHC-F 1:100-500

IP(1-2 μg)

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1 μg/μL

Handling

| Buffer: | Aqueous buffered solution containing 0.01M TBS (pH 7.4) with 1 % BSA, 0.03 % 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: | -20 °C |
| Storage Comment: | Store at -20°C for 12 months. |
| Expiry Date: | 12 months |