

Rabbit KMT1E/SETDB1 Polyclonal Antibody | anti-SETDB1 antibody

KMT1E/SETDB1 Antibody

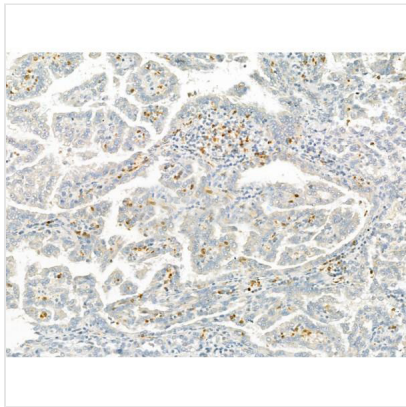
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA31191	Rabbit	Human, Mouse, Rat Predicted Reactivity: Bovine(100%), Horse(100%), Sheep(100%), Rabbit(100%), Dog(100%), Chicken(86%), Xenopus(86%)	ELISA

PRODUCT SYNONYMS

KMT1E/SETDB1; Polyclonal Antibody; KMT1E/SETDB1 Antibody; AU022152; EC 2.1.1.43; ERG-associated protein with SET domain; ESET; H3 K9 HMTase 4; H3-K9-HMTase 4; H3-K9-HMTase4; Histone H3 K9 methyltransferase 4; Histone H3-K9 methyltransferase 4; Histone-lysine N-methyltransferase SETDB1; KG1T; KIAA0067; KMT1E; Lysine N-methyltransferase 1E; MGC90670; mKIAA0067; SET domain bifurcated 1; Set domain protein; bifurcated; 1; SETB1_HUMAN; Setdb1; anti-SETDB1 antibody

PRODUCT SPECIFICATIONS

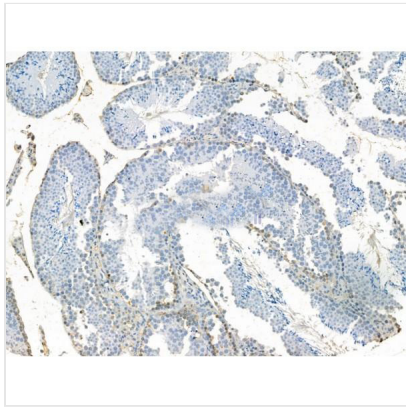
Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Bovine(100%), Horse(100%), Sheep(100%), Rabbit(100%), Dog(100%), Chicken(86%), Xenopus(86%)
Clonality	Polyclonal
Isotype	IgG
Specificity	KMT1E / SETDB1 Antibody detects endogenous levels of total KMT1E / SETDB1.
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin (Thermo Fisher Scientific).
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol
Concentration	1mg/ml (varies by lot)
Sequence Length	1291
Applicable Applications for anti-SETDB1 antibody	ELISA
Application Notes	WB: 1:500-1:2000 IHC: 1:50-1:200 ELISA(peptide): 1:20,000-1:40,000
Immunogen	A synthesized peptide derived from human KMT1E / SETDB1, corresponding to a region within the internal amino acids.
Fragment	Fab fragment
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



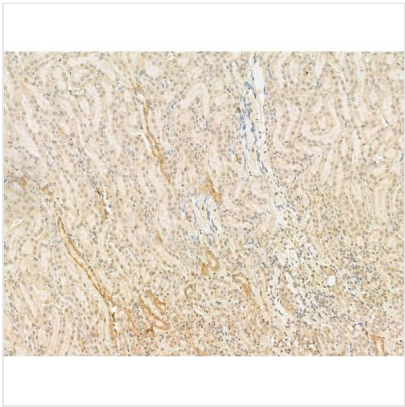
IHC (Immunohistochemistry-Paraffin)
AAA31191 at 1/100 staining Human kidney cancer by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4Â°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry-Paraffin)
AAA31191 at 1/100 staining Mouse brain tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4Â°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry-Paraffin)
AAA31191 at 1/100 staining Mouse testis tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4Â°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry-Paraffin)
AAA31191 at 1/100 staining Rat kidney tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4Â°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry-Paraffin)
AAA31191 at 1/100 staining Rat brain tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4Â°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry-Paraffin)
AAA31191 at 1/100 staining Rat testis tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4Â°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-SETDB1 antibody	Function: 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 (PubMed:12869583, PubMed:17952062). Required for HUSH-mediated heterochromatin formation and gene silencing. Forms a complex with MBD1 and ATF7IP that represses transcription and couples DNA methylation and histone 'Lys-9' trimethylation (PubMed:27732843, PubMed:14536086). Its activity is dependent on MBD1 and is heritably maintained through DNA replication by being recruited by CAF-1 (PubMed:14536086, PubMed:15327775). 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). Required to maintain a transcriptionally repressive state of genes in undifferentiated embryonic stem cells (ESCs) (PubMed:24623306). In ESCs, in collaboration with TRIM28, is also required for H3K9me3 and silencing of endogenous and introduced retroviruses in a DNA-methylation independent-pathway (By similarity). 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). Post Translational Modifications: Degraded by the proteasome, shielded by interaction with ATF7IP. Subcellular Location: Nucleus. Cytoplasm. Chromosome. Note: Associated with non-pericentromeric regions of chromatin. Excluded from nucleoli and islands of condensed chromatin. Tissue Specificity: Widely expressed. High expression in testis. Subunit Structure: Part of a complex containing at least CDYL, REST, WIZ, SETDB1, EHMT1 and EHMT2 (PubMed:19061646). During DNA replication, it is recruited by SETDB1 to form a S phase-specific complex that facilitates methylation of H3 'Lys-9' during replication-coupled chromatin assembly and is at least composed of the CAF-1 subunit CHAF1A, MBD1 and SETDB1 (PubMed:15327775). Probably part of a corepressor complex containing ZNF304, TRIM28, SETDB1 and DNMT1 (PubMed:24623306). Interacts with TRIM28/TIF1B (PubMed:11959841). Interacts with ATF7IP and ATF7IP2; the interaction with ATF7IP protects SETDB1 from proteasomal degradation and is required to stimulate histone methyltransferase activity and facilitate the conversion of dimethylated to trimethylated H3 'Lys-9' (PubMed:14536086, PubMed:15691849). Interacts with MBD1; interaction is abolished when MBD1 is sumoylated (PubMed:15327775, PubMed:17066076). Interacts with CBX1 and CBX5 (PubMed:15899859). Interacts with DNMT3A and DNMT3B (PubMed:16682412). Interacts with SUMO2. Interacts with CHD7, NLK1 and PPARG (PubMed:17952062). Interacts with MPHOSPH8 (PubMed:20871592). Interacts with ERG (By similarity). Interacts with HDAC1, HDAC2, SIN3A and SIN3B (By similarity). Interacts with ATRX. Forms a complex with ATRX, TRIM28 and ZNF274 (PubMed:27029610). Interacts with RESF1 (By similarity). Interacts with ZNF638 (PubMed:30487602). Similarity: The pre-SET, SET and post-SET domains are all required for methyltransferase activity. The 347-amino-acid insertion in the SET domain has no effect on the catalytic activity.Isoform 2 lacks all domains required for histone methyltransferase activity.In the pre-SET domain, Cys residues bind 3 zinc ions that are arranged in a triangular cluster; some of these Cys residues contribute to the binding of two zinc ions within the cluster.Belongs to the class V-like SAM-binding methyltransferase superfamily. Histone-lysine methyltransferase family. Suvar3-9 subfamily.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	25091210
NCBI GeneID	9869
UniProt Accession #	Q15047
Molecular Weight	Observed Molecular Weight: (Observed)143kD. Predicted Molecular Weight: (Calculated)143kDa.
NCBI Official Full Name	Histone-lysine N-methyltransferase SETDB1
NCBI Official Synonym Full Names	SET domain bifurcated histone lysine methyltransferase 1

NCBI Official Symbol	SETDB1
NCBI Official Synonym Symbols	ESET; KG1T; KMT1E; TDRD21; H3-K9-HMTase4
NCBI Protein Information	histone-lysine N-methyltransferase SETDB1
UniProt Protein Name	Histone-lysine N-methyltransferase SETDB1
UniProt Gene Name	SETDB1
UniProt Synonym Gene Names	KIAA0067; KMT1E; ESET; H3-K9-HMTase 4
UniProt Entry Name	SETB1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/kmt1e-setdb1-antibody-elisa/31191>