


Product datasheet

Anti-KMT1E / SETDB1 antibody ab12317

★★★★ 4 Abreviews 27 References 1 Image

Overview

Product name	Anti-KMT1E / SETDB1 antibody
Description	Rabbit polyclonal to KMT1E / SETDB1
Host species	Rabbit
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Chimpanzee, Rhesus monkey, Gorilla, Orangutan 
Immunogen	Synthetic peptide within Human KMT1E/ SETDB1 aa 1100-1200. The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please <u>contact</u> our Scientific Support team to discuss your requirements. Database link: <u>Q15047</u>
Positive control	WB: HeLa and HEK293T whole cell lysates.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7 Preservative: 0.1% Sodium azide Constituents: 0.021% PBS, 1.764% Sodium citrate, 1.815% Tris
Purity	Immunogen affinity purified
Purification notes	Purified using the peptide immobilized on solid support.
Clonality	Polyclonal

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab12317 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000 - 1/10000. Predicted molecular weight: 155 kDa.

Target

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. 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.

Tissue specificity

Widely expressed. High expression in testis.

Sequence similarities

Belongs to the histone-lysine methyltransferase family. Suvar3-9 subfamily.
Contains 1 MBD (methyl-CpG-binding) domain.
Contains 1 post-SET domain.
Contains 1 pre-SET domain.
Contains 1 SET domain.
Contains 2 Tudor domains.

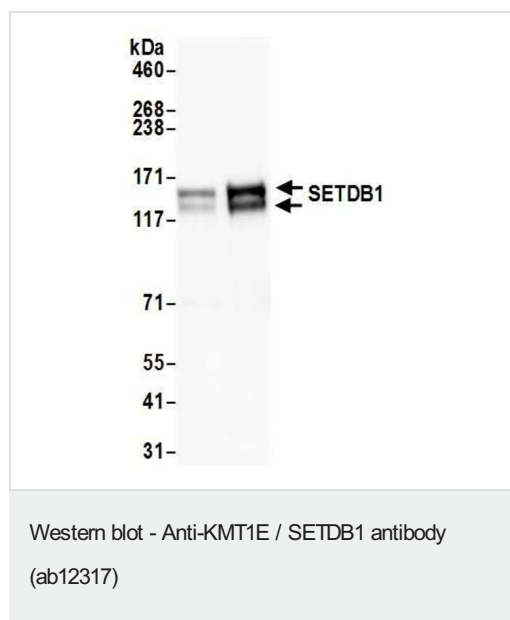
Domain

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.

Cellular localization

Nucleus. Chromosome. Associated with non-pericentromeric regions of chromatin. Excluded from nucleoli and islands of condensed chromatin.

Images



All lanes : Anti-KMT1E / SETDB1 antibody (ab12317) at 1 µg/ml

Lane 1 : HeLa whole cell lysate

Lane 2 : HEK293T whole cell lysate

Lysates/proteins at 50 µg per lane.

Predicted band size: 155 kDa

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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