

Product datasheet

Anti-KMT5A / SETD8 / Pr-SET7 antibody ab111691

★★★★★ [3 Abreviews](#) [3 References](#) [2 Images](#)

Overview

Product name	Anti-KMT5A / SETD8 / Pr-SET7 antibody
Description	Rabbit polyclonal to KMT5A / SETD8 / Pr-SET7
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment corresponding to Human KMT5A/ SETD8/ Pr-SET7 aa 50-300. Recombinant fragment, corresponding to a region within amino acids 81-290 of Human KMT5A/ SETD8/ Pr-SET7, isoform 1(42kda) and 2(39KDa)
Positive control	NT2D1, IMR32, U-87 MG and MCF7 whole cell lysates; HeLa xenograft tissue.
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. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.00 Preservative: 0.01% Thimerosal (merthiolate) Constituents: 1.21% Tris, 0.75% Glycine, 20% Glycerol (glycerin, glycerine)
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab111691 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	★★★★★ (3)	1/500 - 1/3000. Predicted molecular weight: 39 kDa.
IHC-P		1/100 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

Function

Protein-lysine N-methyltransferase that monomethylates both histones and non-histone proteins. Specifically monomethylates 'Lys-20' of histone H4 (H4K20me1). H4K20me1 is enriched during mitosis and represents a specific tag for epigenetic transcriptional repression. Mainly functions in euchromatin regions, thereby playing a central role in the silencing of euchromatic genes. Required for cell proliferation, probably by contributing to the maintenance of proper higher order structure of DNA during mitosis. Involved in chromosome condensation and proper cytokinesis. Nucleosomes are preferred as substrate compared to free histones. Mediates monomethylation of p53/TP53 at 'Lys-382', leading to repress p53/TP53-target genes.

Sequence similarities

Belongs to the histone-lysine methyltransferase family. PR/SET subfamily. Contains 1 SET domain.

Developmental stage

Not detected during G1 phase. First detected during S through G2 phases, and peaks during mitosis (at protein level).

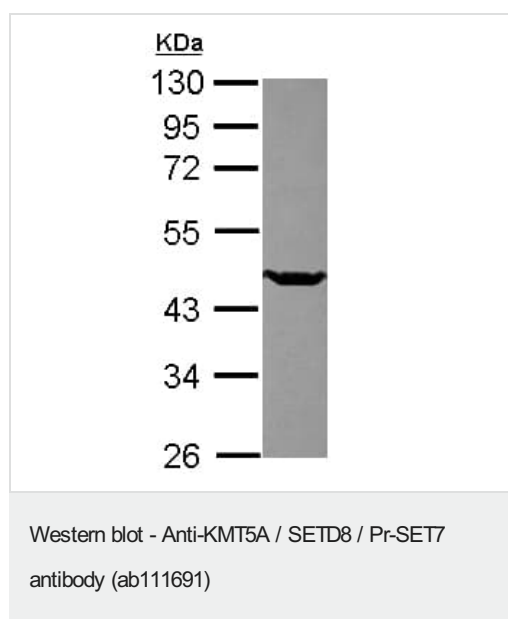
Domain

Although the SET domain contains the active site of enzymatic activity, both sequences upstream and downstream of the SET domain are required for methyltransferase activity.

Cellular localization

Nucleus. Chromosome. Specifically localizes to mitotic chromosomes. Associates with silent chromatin on euchromatic arms. Not associated with constitutive heterochromatin.

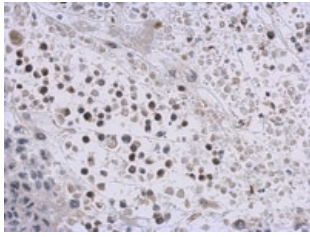
Images



Anti-KMT5A / SETD8 / Pr-SET7 antibody (ab111691) at 1/2000 dilution + U-87 MG whole cell lysate at 30 µg

Predicted band size: 39 kDa

10% SDS-PAGE.



ab111691 at 1/500 dilution staining KMT5A / SETD8 / Pr-SET7 in Formalin-fixed, paraffin-embedded HeLa xenograft tissue by Immunohistochemistry.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KMT5A / SETD8 / Pr-SET7 antibody (ab111691)

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

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