




## Product datasheet

### Anti-KMT6 / EZH2 antibody ab186006

★★★★★ [5 Abreviews](#) [70 References](#) [4 Images](#)

#### Overview

<b>Product name</b>	Anti-KMT6 / EZH2 antibody
<b>Description</b>	Rabbit polyclonal to KMT6 / EZH2
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IP, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human <b>Predicted to work with:</b> Sheep, Rabbit, Horse, Chicken, Guinea pig, Cow, Dog, Turkey, Pig, Xenopus laevis, Chimpanzee, Zebrafish, Rhesus monkey, Gorilla, Xenopus tropicalis 
<b>Immunogen</b>	Synthetic peptide within Human KMT6/ EZH2 aa 650 to the C-terminus. 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 <a href="#">contact</a> our Scientific Support team to discuss your requirements. CAA64955.1 Database link: <a href="#">Q15910</a>  <a href="#">Run BLAST with</a>  <a href="#">Run BLAST with</a>
<b>Positive control</b>	293T, HeLa, Jurkat, and Mouse TCMK-1 whole cell lysate.
<b>General notes</b>	<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&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7 Preservative: 0.09% Sodium azide Constituent: 99% Tris citrate/phosphate  pH 7-8

<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

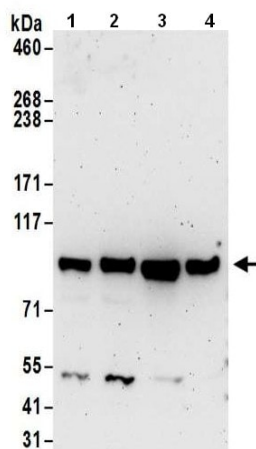
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab186006 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
<b>WB</b>	★★★★★ (2)	1/500 - 1/2500. Predicted molecular weight: 85 kDa.
<b>IP</b>		Use at 2-10 µg/mg of lysate.
<b>IHC-P</b>	★★★☆☆ (1)	Use at an assay dependent concentration.

## Target

<b>Function</b>	Polycomb group (PcG) protein. Catalytic subunit of the PRC2/EED-EZH2 complex, which methylates 'Lys-9' and 'Lys-27' of histone H3, leading to transcriptional repression of the affected target gene. Able to mono-, di- and trimethylate 'Lys-27' of histone H3 to form H3K27me1, H3K27me2 and H3K27me3, respectively. Compared to EZH2-containing complexes, it is more abundant in embryonic stem cells and plays a major role in forming H3K27me3, which is required for embryonic stem cell identity and proper differentiation. The PRC2/EED-EZH2 complex may also serve as a recruiting platform for DNA methyltransferases, thereby linking two epigenetic repression systems. Genes repressed by the PRC2/EED-EZH2 complex include HOXC8, HOXA9, MYT1, CDKN2A and retinoic acid target genes.
<b>Tissue specificity</b>	Expressed in many tissues. Overexpressed in numerous tumor types including carcinomas of the breast, colon, larynx, lymphoma and testis.
<b>Sequence similarities</b>	Belongs to the histone-lysine methyltransferase family. EZ subfamily. Contains 1 SET domain.
<b>Developmental stage</b>	Expression decreases during senescence of embryonic fibroblasts (HEFs). Expression peaks at the G1/S phase boundary.
<b>Post-translational modifications</b>	Phosphorylated by AKT1. Phosphorylation by AKT1 reduces methyltransferase activity.
<b>Cellular localization</b>	Nucleus.

## Images



Western blot - Anti-KMT6 / EZH2 antibody  
(ab186006)

**Lane 1 :** Anti-KMT6 / EZH2 antibody (ab186006) at 1  $\mu$ g

**Lanes 2-4 :** Anti-KMT6 / EZH2 antibody (ab186006) at 1  $\mu$ g/ml

**Lane 1 :** 293T whole cell lysate

**Lane 2 :** HeLa whole cell lysate

**Lane 3 :** Jurkat whole cell lysate

**Lane 4 :** Mouse TCMK-1 cells.lysate

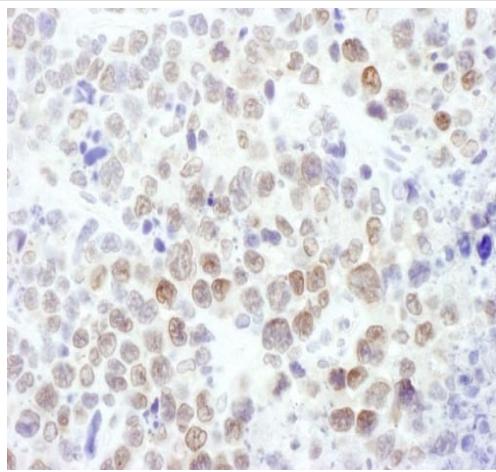
Lysates/proteins at 50  $\mu$ g per lane.

Developed using the ECL technique.

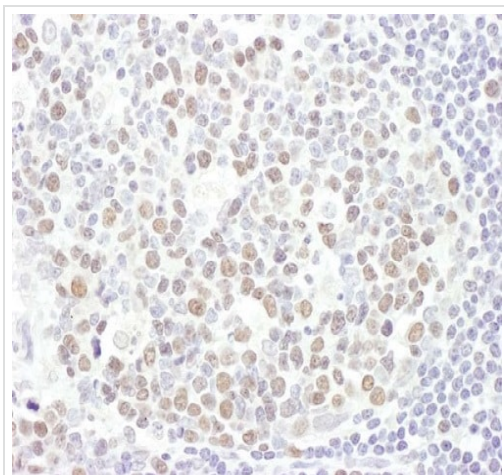
**Predicted band size:** 85 kDa

**Exposure time:** 3 minutes

Mouse plasmacytoma tissue stained with ab186006 at a dilution of 1:1000 to detect EZH2.

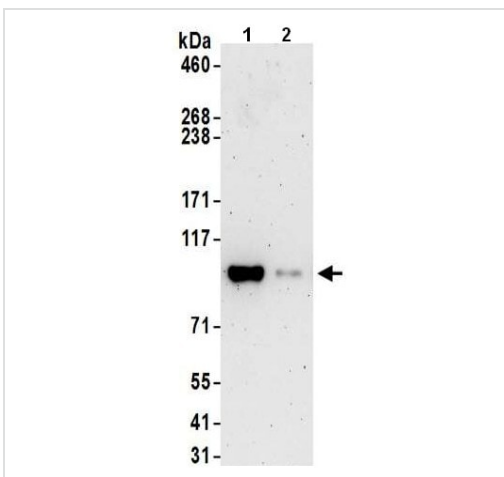


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KMT6 / EZH2 antibody  
(ab186006)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KMT6 / EZH2 antibody (ab186006)

Human ovarian tissue stained with ab186006 at a dilution of 1:1000 to detect EZH2.



Immunoprecipitation - Anti-KMT6 / EZH2 antibody (ab186006)

Detection of KMT6 / EZH2 by Western Blot of Immunoprecipitate.

Lane 1: ab186006 at 1 µg/ml labeling KMT6 / EZH2 in 293T whole cell lysate immunoprecipitated using ab186006 at 6µg/mg lysate (1 mg/IP; 20% of IP loaded/lane).

Lane 2: Control IgG

Detection: Chemiluminescence with an exposure time of 3 minutes.

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

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