


## Product datasheet

# Anti-KMT6 / EZH2 antibody ab228697

1 Abreviews 3 References 3 Images

### Overview

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<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, ChIP, ICC/IF
<b>Species reactivity</b>	<p><b>Reacts with:</b> Human</p> <p><b>Predicted to work with:</b> Mouse, Rat, Cow, Pig, Xenopus laevis, Zebrafish, Rhesus monkey</p> <p></p>
<b>Immunogen</b>	<p>Recombinant fragment within Human KMT6/ EZH2 (internal sequence). The exact sequence is proprietary.</p> <p>Database link: <a href="#">Q15910</a></p>
<b>Positive control</b>	WB: NCH1299, HCT 116 and MCF7 whole cell lysates. ICC/IF: HeLa cells. ChIP: HeLa chromatin extract.
<b>General notes</b>	<p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications &amp; species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications &amp; species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications &amp; species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.</p> <p>Applications &amp; species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.</p> <p>Please check that this product meets your needs before purchasing. 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, as well as customer reviews and Q&amp;As.</p>

## Properties

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<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: 7.00 Preservative: 0.01% Thimerosal (merthiolate) Constituents: 1.21% Tris, 0.75% Glycine, 20% Glycerol (glycerin, glycerine)
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

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Our [Abpromise guarantee](#) covers the use of **ab228697** in the following tested applications.

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

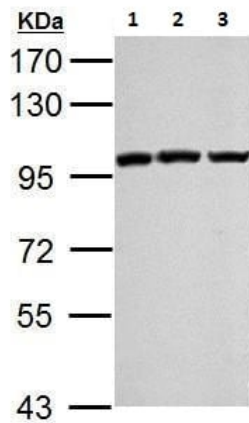
Application	Abreviews	Notes
WB		1/500 - 1/3000. Predicted molecular weight: 85 kDa.
ChIP		Use at an assay dependent concentration.
ICC/IF		1/100 - 1/1000.

## Target

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<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.

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Western blot - Anti-KMT6 / EZH2 antibody (ab228697)

**All lanes :** Anti-KMT6 / EZH2 antibody (ab228697) at 1/1000 dilution

**Lane 1 :** NCI-H1299 (human lung carcinoma cell line) whole cell lysate

**Lane 2 :** HCT 116 (human colorectal carcinoma cell line) whole cell lysate

**Lane 3 :** MCF7 (human breast adenocarcinoma cell line) whole cell lysate

Lysates/proteins at 30 µg per lane.

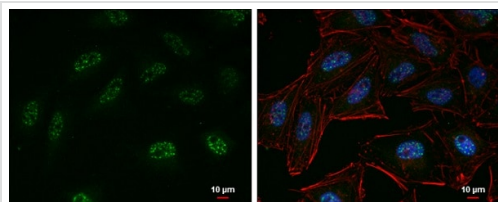
**Secondary**

**All lanes :** HRP-conjugated anti-rabbit IgG

Developed using the ECL technique.

**Predicted band size:** 85 kDa

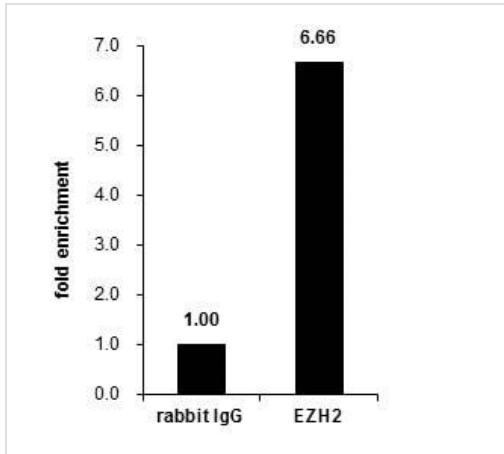
**7.5% SDS-PAGE**



Immunocytochemistry/ Immunofluorescence - Anti-KMT6 / EZH2 antibody (ab228697)

HeLa (human epithelial cell line from cervix adenocarcinoma) cells stained for KMT6 / EZH2 (green) using ab228697 at 1/200 dilution in ICC/IF. Cells were fixed in 4% paraformaldehyde at RT for 15 minutes.

Nuclear counterstain: Hoechst 33342 (blue).



ChIP - Anti-KMT6 / EZH2 antibody (ab228697)

Cross-linked ChIP was performed with HeLa chromatin extract and 5 µg of either control rabbit IgG or ab228697. The precipitated DNA was detected by PCR with primer set targeting to CCND2.

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

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