abcam

Product datasheet

Anti-KMT6 / EZH2 antibody ab228697

1 Abreviews 7 References 3 Images

Overview

Product name	Anti-KMT6 / EZH2 antibody
Description	Rabbit polyclonal to KMT6 / EZH2
Host species	Rabbit
Tested applications	**Suitable for:** WB, ChIP, ICC/IF
Species reactivity	**Reacts with:** Human **Predicted to work with:** Mouse, Rat, Cow, Pig, Xenopus laevis, Zebrafish, Rhesus monkey
Immunogen	Recombinant fragment within Human KMT6/ EZH2 (internal sequence). The exact sequence is proprietary. Database link: **Q15910**
Positive control	WB: NCI-H1299, HCT 116 and MCF7 whole cell lysates. ICC/IF: HeLa cells. ChIP: HeLa chromatin extract.
General notes	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. 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

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 long term. Avoid freeze / thaw cycle.
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 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

Function 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.

Tissue specificity Expressed in many tissues. Overexpressed in numerous tumor types including carcinomas of the breast, colon, larynx, lymphoma and testis.

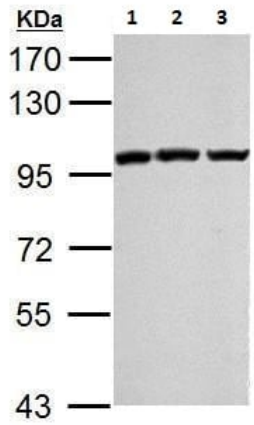
Sequence similarities Belongs to the histone-lysine methyltransferase family. EZ subfamily.
Contains 1 SET domain.

Developmental stage Expression decreases during senescence of embryonic fibroblasts (HEFs). Expression peaks at the G1/S phase boundary.

Post-translational modifications Phosphorylated by AKT1. Phosphorylation by AKT1 reduces methyltransferase activity.

Cellular localization Nucleus.

Images



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

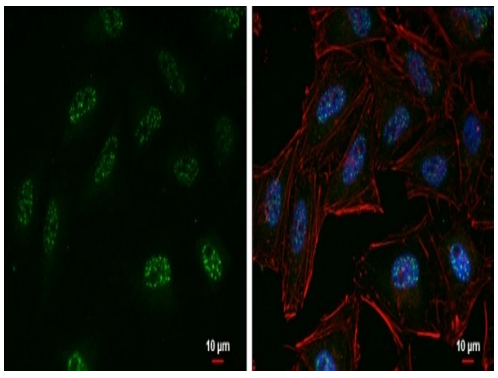
Lysates/proteins at 30 µg per lane.

Secondary
All lanes : HRP-conjugated anti-rabbit IgG

Developed using the ECL technique.

Predicted band size: 85 kDa

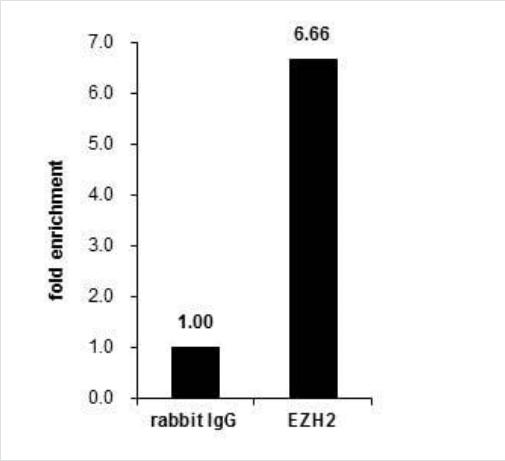
7.5% SDS-PAGE



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.

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors