

EZH2 antibody (mAb)

Catalog Nos: 39875, 39076, 39876

RRID: AB_2561022

Clone: AC22

Application(s): ChIP

Reactivity: Human, Mouse

Quantities: 100 µg, 50 µg, 10 µg

Purification: Protein A Chromatography

Host: Mouse

Isotype: IgG2a

Molecular Weight: 96 kDa

Background: EZH2 – (Enhancer of Zeste homolog 2, also designated Enx1 and SETDB1) is a human homolog of the *Drosophila* Polycomb-group protein Enhancer of Zeste protein. It contains a SET domain that catalyzes the methylation of histone H3 at lysine 27 (Histone H3 Lys27 monomethylated, dimethylated and trimethylated). Polycomb-group proteins repress gene expression by binding to chromatin and locally altering chromatin structure. EZH2, BMI-1 and Suz12 are present in the PRC2 and PRC3 protein complexes that function as mediators of epigenetic transcriptional silencing. EZH2 associates with the embryonic ectoderm development protein, the VAV1 oncoprotein, and the X-linked nuclear protein. EZH2 may play a role in the hematopoietic and central nervous systems. Dereglulation of EZH2 is linked to a variety of cancers.

Immunogen: This EZH2 antibody was raised against a recombinant protein corresponding to amino acids 353-451 of human EZH2.

Buffer: Purified IgG in 70 mM Tris (pH 8), 105 mM NaCl, 31 mM glycine, 0.07 mM EDTA, 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

Application Notes:

Applications Validated by Active Motif:

ChIP: 1 - 3 µg per ChIP

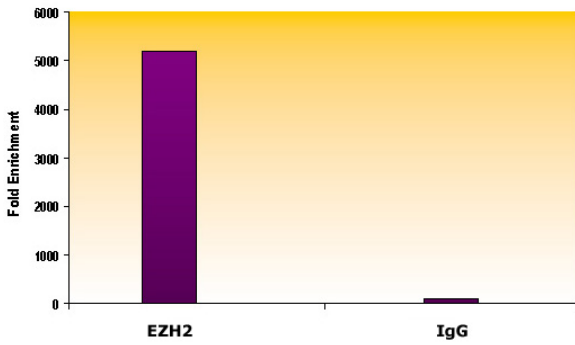
CUT&RUN: 1 µl per 50 µl reaction

This antibody has been published, but not validated by Active Motif, for Western blot. For an antibody we have tested in use in Western blotting, see Catalog No. 39933.

For EZH2, we also offer an AbFlex® EZH2 Recombinant Antibody (rAb). For details, see Catalog No. 91159.

Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



EZH2 antibody (mAb) tested by ChIP.

Chromatin IP performed using the ChIP-IT[®] Express Kit (Catalog No. 53008) and HeLa Chromatin (1.5×10^6 cell equivalents per ChIP) using 3 μ g of EZH2 antibody or the equivalent amount of IgG as a negative control. Real time, quantitative PCR (RT-qPCR) was performed on DNA purified from the ChIP reaction using a primer pair specific for the Myt1 gene. Data are presented as Fold Enrichment of the ChIP antibody signal versus the negative control IgG using the ddCT method.

EZH2 antibody (rAb) tested by CUT&RUN

CUT&RUN was performed using 500,000 K562 nuclei and sequenced using 38 base-pair, paired-end reads on the Illumina NovaSeq. Data was collected from 58 million reads, and EZH2 data is shown for Chromosome 12.

