

EZH2 antibody (pAb)

Catalog Nos: 39901, 39002, 39902

RRID: AB_2614956

Application(s): ChIP, ChIP-Seq, CUT&RUN, IP

Reactivity: Human, Mouse

Volumes: 100 µl, 50 µl, 10 µl

Purification: None

Host: Rabbit

Isotype: Serum

Molecular Weight: 96 kDa

Background: EZH2 – (Enhancer of Zeste homolog 2) 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. Deregulation of EZH2 is linked to a variety of cancers.

Immunogen: This EZH2 antibody was raised against a recombinant fusion protein corresponding to amino acids 1-370 of mouse EZH2.

Buffer: Rabbit serum containing 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic. For your convenience, an IgG version (Catalog No. 61641) of this antibody that was purified by Protein A Chromatography is also available.

Application Notes:

Applications Validated by Active Motif:

ChIP-Seq: 5 µl each

CUT&RUN: 1 µl per 50 µl reaction

This antibody has not been validated in WB, but a WB-validated antibody is available for this target: 39933.

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

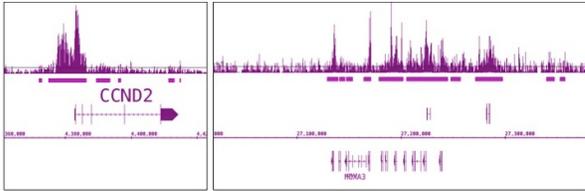
References: EZH2 antibody has been cited in one or more publications. To see an up-to-date listing of papers that describe its use, please go to www.activemotif.com/catalog/details/39901.

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.

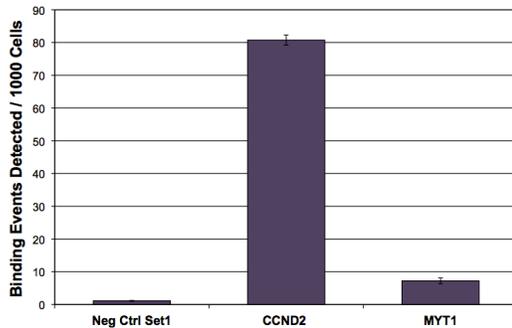
This product is for research use only and is not for use in diagnostic procedures.

EZH2 antibody (pAb) tested by ChIP-Seq.

ChIP was performed using the ChIP-IT[®] High Sensitivity Kit (Cat. No. 53040) with chromatin from 4 million SUDHL6 B cell lymphoma cells and 5 μ l of EZH2 antibody. ChIP DNA was sequenced on the Illumina HiSeq and 25 million sequence tags were mapped to identify EZH2 binding sites. The image on the left shows EZH2 binding at the 5' end of the CCND2 gene. The image on the right shows EZH2 binding across the repressed HOX gene cluster.



EZH2 ChIP qPCR

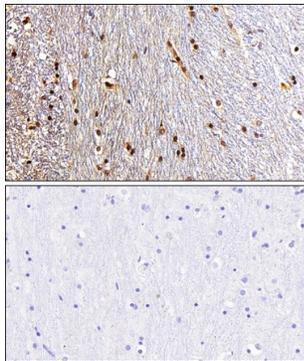


EZH2 antibody (pAb) tested by ChIP.

ChIP was performed using the ChIP-IT[®] High Sensitivity Kit (Cat. No. 53040) with chromatin from 4 million SUDHL6 B cell lymphoma cells and 5 μ l of EZH2 antibody. ChIP DNA was used in qPCR with the negative control primer pair or gene-specific primer pairs as indicated. Data are presented as Binding Events Detected per 1000 Cells using Active Motif's Epigenetic Services normalization scheme which accounts for primer efficiency and the amount of chromatin used in the ChIP reaction.

EZH2 antibody (pAb) tested by Immunohistochemistry

Nuclear staining pattern is detected in Formalin-fixed, paraffin-embedded tissue sections from human substantia nigra (midbrain). Top Panel: 5-mC antibody at 1:1000 dilution. Bottom Panel: No primary antibody (2nd step antibody alone)



EZH2 antibody (pAb) tested by CUT&RUN

CUT&RUN was performed using 500,000 K562 cells and sequenced using 38 base-pair, paired-end reads on the Illumina NovaSeq. Data was collected from 30 million reads, and EZH2 data is shown for Chromosome 1.

