

Rabbit EZH2 Polyclonal Antibody | anti-EZH2 antibody

EZH2 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA321828	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

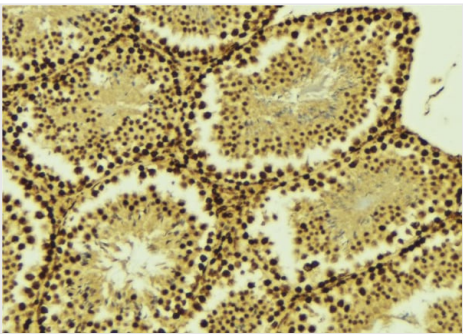
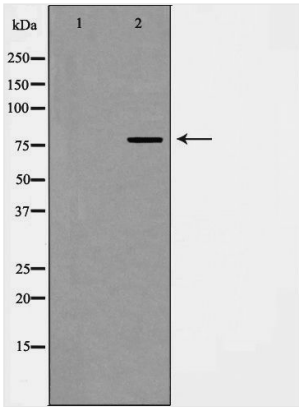
PRODUCT SYNONYMS

EZH2; Polyclonal Antibody; EZH2 Antibody; Enhancer of zeste 2; enhancer of zeste 2 polycomb repressive complex 2 subunit; Enhancer of zeste homolog 2 (Drosophila); Enhancer of zeste homolog 2; Enhancer of zeste; Drosophila; homolog 2; ENX 1; Enx 1h; ENX-1; ENX1; Enx1h; EZH 2; EZH1; EZH2_HUMAN; EZH2b; Histone-lysine N-methyltransferase EZH2; KMT 6; KMT6; KMT6A; Lysine N-methyltransferase 6; MGC9169; WVS; WVS2; anti-EZH2 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	EZH2 antibody detects endogenous levels of total EZH2
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	746
Applicable Applications for anti-EZH2 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human EZH2
Subcellular Location	Nucleus.
Tissue Specificity	Expressed in many tissues. Overexpressed in numerous tumor types including carcinomas of the breast, colon, larynx, lymphoma and testis.
Predicted Cross Reactivity	Pig, Zebrafish, Bovine, Horse, Rabbit, Dog, Chicken, Xenopus
Similarity	Pig (100%), Zebrafish (90%), Bovine (100%), Horse (100%), Rabbit (100%), Dog (100%), Chicken (100%), Xenopus (92%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemistry)
AAA321828 at 1/100 staining Mouse testis tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

WB (Western Blot)
Western blot analysis of EZH2 expression in HEK293 cell lysate. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-EZH2 antibody

Function: Polycomb group (PcG) protein. Catalytic subunit of the PRC2/EED-EZH2 complex, which methylates 'Lys-9' (H3K9me) and 'Lys-27' (H3K27me) 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. Displays a preference for substrates with less methylation, loses activity when progressively more methyl groups are incorporated into H3K27, H3K27me0 > H3K27me1 > H3K27me2 (PubMed:22323599). Compared to EZH1-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. EZH2 can also methylate non-histone proteins such as the transcription factor GATA4 and the nuclear receptor RORA. Regulates the circadian clock via histone methylation at the promoter of the circadian genes. Essential for the CRY1/2-mediated repression of the transcriptional activation of PER1/2 by the CLOCK-ARNTL/BMAL1 heterodimer; involved in the di and trimethylation of 'Lys-27' of histone H3 on PER1/2 promoters which is necessary for the CRY1/2 proteins to inhibit transcription.

Subunit Structure: Binds ATRX via the SET domain (Probable). Component of the PRC2/EED-EZH2 complex, which includes EED, EZH2, SUZ12, RBBP4 and RBBP7 and possibly AEBP2. The minimum components required for methyltransferase activity of the PRC2/EED-EZH2 complex are EED, EZH2 and SUZ12. The PRC2 complex may also interact with DNMT1, DNMT3A, DNMT3B and PHF1 via the EZH2 subunit and with SIRT1 via the SUZ12 subunit. Interacts with HDAC1 and HDAC2. Interacts with PRAME. Interacts with CDYL. Interacts with CLOCK, ARNTL/BMAL1 and CRY1 (By similarity). Interacts with DNMT3L; the interaction is direct (By similarity).

Post-translational Modifications: Phosphorylated by AKT1. Phosphorylation by AKT1 reduces methyltransferase activity. Phosphorylation at Thr-345 by CDK1 and CDK2 promotes maintenance of H3K27me3 levels at EZH2-target loci, thus leading to epigenetic gene silencing. Sumoylated. Glycosylated: O-GlcNAcylation at Ser-75 by OGT increases stability of EZH2 and facilitates the formation of H3K27me3 by the PRC2/EED-EZH2 complex.

Similarity: Belongs to the class V-like SAM-binding methyltransferase superfamily. Histone-lysine methyltransferase family. EZ subfamily.

NCBI AND UNIPROT INFORMATION

NCBI GI #	322506097
NCBI GeneID	2146
NCBI Accession #	NP_001190176.1
NCBI GenBank Nucleotide #	NM_001203247.1
UniProt Accession #	Q15910; Q15755; Q75MG3; Q92857; Q96FI6; B2RAQ1; B3KS30; B7Z1D6; B7Z7L6
Molecular Weight	Observed: 85 kDa Predicted: 86 kDa

NCBI Official Full Name	histone-lysine N-methyltransferase EZH2 isoform c
NCBI Official Synonym Full Names	enhancer of zeste 2 polycomb repressive complex 2 subunit
NCBI Official Symbol	EZH2
NCBI Official Synonym Symbols	WVS; ENX1; KMT6; WVS2; ENX-1; EZH2b; KMT6A
NCBI Protein Information	histone-lysine N-methyltransferase EZH2
UniProt Protein Name	Histone-lysine N-methyltransferase EZH2
UniProt Gene Name	EZH2

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/ezh2-antibody-immunohistochemistry-western-blot-elisa/321828>