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EZH2
Rabbit Monoclonal antibody(Mab)
Catalog # AD80174

Specification

EZH2 - Product info

Application	**IHC-P**
Primary Accession	Q15910
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Monoclonal**
Calculated MW	**85363**

EZH2 - Additional info

Gene ID	**2146**
Gene Name	**EZH2 (HGNC:3527)**

Other Names
Histone-lysine N-methyltransferase EZH2, 2.1.1.356, ENX-1, Enhancer of zeste homolog 2, Lysine N-methyltransferase 6, EZH2 (HGNC:3527), KMT6

Storage
Maintain refrigerated at 2-8°C

Precautions	**EZH2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.**

EZH2 - Protein Information

Name EZH2 (HGNC:3527)

Synonyms	**KMT6**
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.
Cellular Location	**Nucleus**
Tissue Location	**Expressed in many tissues. Overexpressed in numerous tumor types including carcinomas of the breast, colon, larynx, lymphoma and testis.**

EZH2 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

EZH2 - Images