

**Anti-KMT6 / EZH2 Rabbit Monoclonal Antibody**  
Catalog # ABO14093**Specification****Anti-KMT6 / EZH2 Rabbit Monoclonal Antibody - Product Information**

Application	WB, IHC, IF, ICC, FC
Primary Accession	<a href="#">Q15910</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-KMT6 / EZH2 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

**Anti-KMT6 / EZH2 Rabbit Monoclonal Antibody - Additional Information**

**Gene ID** 2146

**Other Names**

Histone-lysine N-methyltransferase EZH2, 2.1.1.356, ENX-1, Enhancer of zeste homolog 2, Lysine N-methyltransferase 6, EZH2 ([http://www.genenames.org/cgi-bin/gene\\_symbol\\_report?hgnc\\_id=3527](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=3527) target="\_blank">HGNC:3527</a>), KMT6

**Calculated MW**

85363 MW KDa

**Application Details**

WB 1:500-1:1000<br>IHC 1:50-1:200<br>ICC/IF 1:50-1:200<br>FC 1:50

**Subcellular Localization**

Nucleus.

**Tissue Specificity**

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

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human KMT6 / EZH2

**Purification**

Affinity-chromatography

**Storage**

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

**Anti-KMT6 / EZH2 Rabbit Monoclonal Antibody - 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:<a href="http://www.uniprot.org/citations/22323599" target="\_blank">22323599</a>, PubMed:<a href="http://www.uniprot.org/citations/30923826" target="\_blank">30923826</a>). 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-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. Note=Localizes to the inactive X chromosome in trophoblast stem cells. {ECO:0000250|UniProtKB:Q61188}

**Tissue Location**

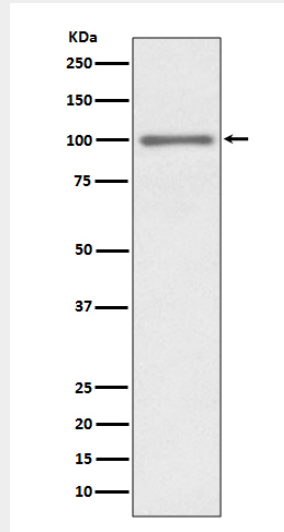
In the ovary, expressed in primordial follicles and oocytes and also in external follicle cells (at protein level) (PubMed:31451685). Expressed in many tissues (PubMed:14532106) Overexpressed in numerous tumor types including carcinomas of the breast, colon, larynx, lymphoma and testis (PubMed:14532106)

**Anti-KMT6 / EZH2 Rabbit Monoclonal Antibody - Protocols**

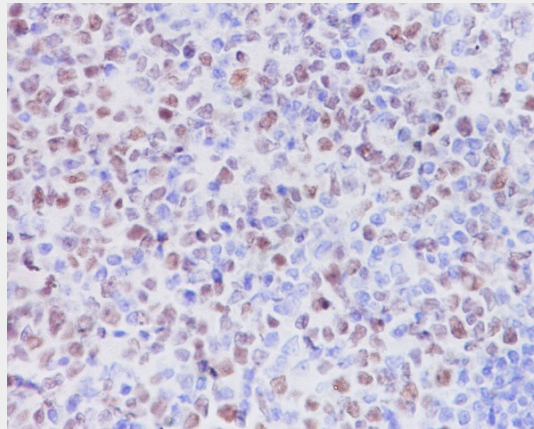
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

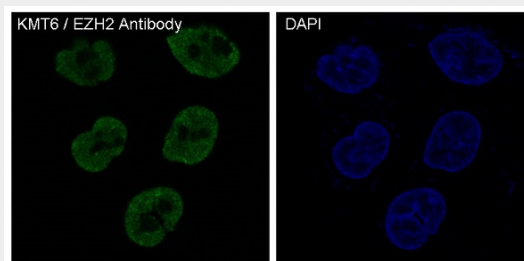
**Anti-KMT6 / EZH2 Rabbit Monoclonal Antibody - Images**



Western blot analysis of KMT6 / EZH2 expression in HEK293 cell lysate.



Immunohistochemical analysis of paraffin-embedded human tonsil, using KMT6 / EZH2 Antibody.



Immunofluorescent analysis of HeLa cells, using KMT6 / EZH2 Antibody.