

EZH2 Antibody (N-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS14818**Specification**

EZH2 Antibody (N-Terminus) - Product Information

Application	ICC, IF, WB
Primary Accession	Q15910
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	85kDa KDa

EZH2 Antibody (N-Terminus) - Additional Information**Gene ID** 2146**Other Names**

Histone-lysine N-methyltransferase EZH2, 2.1.1.43, ENX-1, Enhancer of zeste homolog 2, Lysine N-methyltransferase 6, EZH2, KMT6

Target/Specificity

Human EZH2. Multiple isoforms of EZH2 are known to exist. EZH2 antibody is predicted to not cross-react with EZH1.

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

Precautions

EZH2 Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

EZH2 Antibody (N-Terminus) - 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, PubMed:30923826). 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)

EZH2 Antibody (N-Terminus) - Protocols

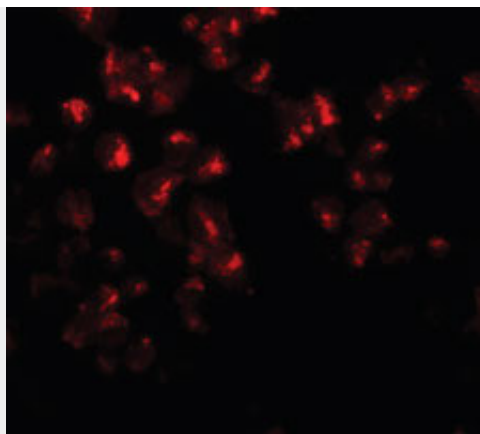
Provided below are standard protocols that you may find useful for product applications.

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

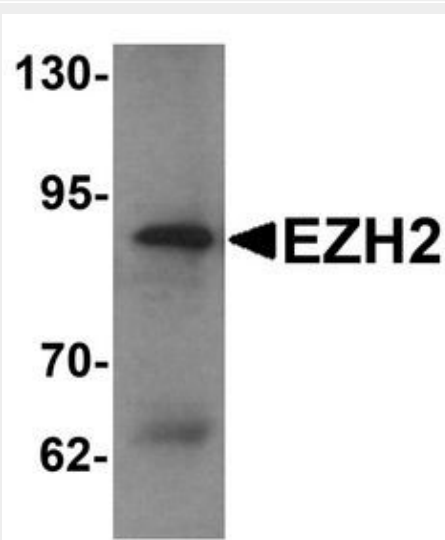
EZH2 Antibody (N-Terminus) - Images



Immunocytochemistry of EZH2 in 293 cells with EZH2 antibody at 10 ug/ml.



Immunofluorescence of EZH2 in 293 cells with EZH2 antibody at 20 ug/ml.



Western blot analysis of EZH2 in 293 cell lysate with EZH2 antibody at 1 ug/ml.

EZH2 Antibody (N-Terminus) - Background

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EZH2 Antibody (N-Terminus) - References

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Laible G.,et al.EMBO J. 16:3219-3232(1997).
Ota T.,et al.Nat. Genet. 36:40-45(2004).

Hillier L.W.,et al.Nature 424:157-164(2003).

Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.