

EZH1 Antibody (Center) Blocking Peptide Synthetic peptide Catalog # BP2511c

Specification

EZH1 Antibody (Center) Blocking Peptide - Product Information

Primary Accession

<u>Q92800</u>

EZH1 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 2145

Other Names Histone-lysine N-methyltransferase EZH1, ENX-2, Enhancer of zeste homolog 1, EZH1, KIAA0388

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP2511c was selected from the Center region of human EZH1 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions This product is for research use only. Not for use in diagnostic or therapeutic procedures.

EZH1 Antibody (Center) Blocking Peptide - Protein Information

Name EZH1

Synonyms KIAA0388

Function

Polycomb group (PcG) protein. Catalytic subunit of the PRC2/EED-EZH1 complex, which methylates 'Lys-27' 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. Required for embryonic stem cell derivation and self-renewal, suggesting that it is involved in safeguarding embryonic stem cell identity. Compared to EZH2-containing complexes, it is less abundant in embryonic stem cells, has weak methyltransferase activity and plays a less critical role in forming H3K27me3, which is required for embryonic stem cell identity and proper differentiation.

Cellular Location



Nucleus. Note=Colocalizes with trimethylated 'Lys-27' of histone H3

EZH1 Antibody (Center) Blocking Peptide - Protocols

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

<u>Blocking Peptides</u>

EZH1 Antibody (Center) Blocking Peptide - Images

EZH1 Antibody (Center) Blocking Peptide - Background

EZH1 encodes a protein of 747 amino acids that displays 55% amino acid identity overall with the Drosophila homolog.1 The strong sequence conservation suggested potential roles for EZH1 in human development as a transcriptional regulator and as a component of protein complexes that preserve heterochromatin stability. EZH1 is expressed as 2 major transcripts in all adult and fetal human tissues evaluated.. Analysis of an EZH1 cDNA revealed an unusual splicing event involving EZH1 and a tandemly linked gene GPR2 and suggested a potential mechanism for modifying the EZH1 protein in the conserved C-terminal domain. The GPR2 gene maps to 17q21.1-q21.3 in the vicinity of the BRCA1 gene.

EZH1 Antibody (Center) Blocking Peptide - References

Ogawa, M., et al., Biochim. Biophys. Acta 1395(2):151-158 (1998).Abel, K.J., et al., Genomics 37(2):161-171 (1996).Friedman, L.S., et al., Genomics 25(1):256-263 (1995).Osborne-Lawrence, S., et al., Genomics 25(1):248-255 (1995).Brody, L.C., et al., Genomics 25(1):238-247 (1995).