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EZH1 Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2511c

Specification

EZH1 Antibody (Center) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	Q92800
Other Accession	A7E2Z2
Reactivity	**Human**
Predicted	**Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**85271**
Antigen Region	**393-422**

EZH1 Antibody (Center) - Additional Information

Gene ID 2145

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

Target/Specificity
This EZH1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 393-422 amino acids from the Central region of human EZH1.

Dilution
WB~~1:1000
IHC-P~~1:50~100
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
EZH1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

EZH1 Antibody (Center) - Protein Information

Name EZH1

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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.

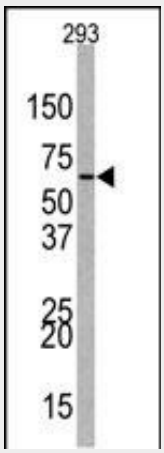
Cellular Location
Nucleus. Note=Colocalizes with trimethylated 'Lys-27' of histone H3

EZH1 Antibody (Center) - 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

EZH1 Antibody (Center) - Images



Western blot analysis of anti-EZH1 Antibody (Center) (Cat.#AP2511c) in 293 cell line lysates (35ug/lane). EZH1(arrow) was detected using the purified Pab.

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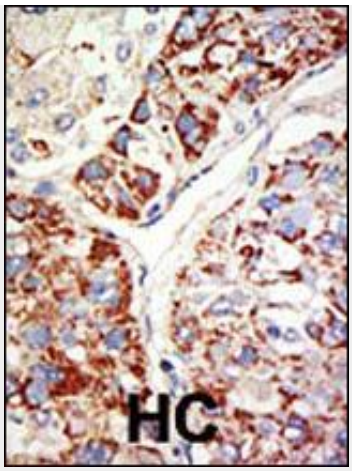
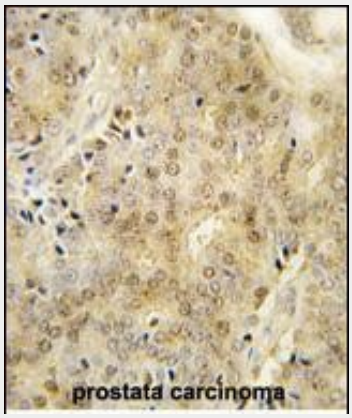


Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



Formalin-fixed and paraffin-embedded human prostata carcinoma tissue reacted with EZH1 Antibody (Center) (Cat.#AP2511c), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

EZH1 Antibody (Center) - 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) - 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).