

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

EZH1 Antibody (Center) - Product Information

Application	WB, IHC-P,E
Primary Accession	O92800
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

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

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.

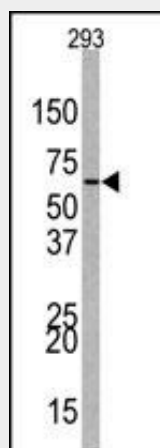
Cellular Location

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

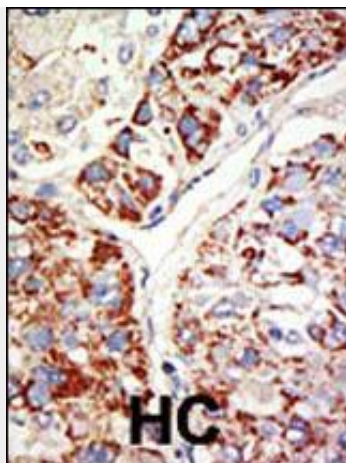
EZH1 Antibody (Center) - Protocols

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

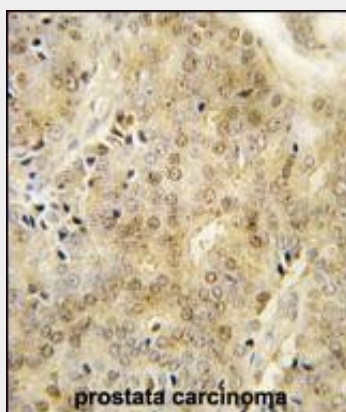
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

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.



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 prostate 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).