

Anti-EZH1 (RABBIT) Antibody
EZH1 Antibody
Catalog # ASR5575**Specification**

Anti-EZH1 (RABBIT) Antibody - Product Information

Host	Rabbit
Conjugate	Unconjugated
Target Species	Human
Reactivity	Human, Mouse
Clonality	Polyclonal
Application	WB, E, I, LCI
Application Note	Affinity purified Anti-EZH1 antibody has been tested for use in ELISA and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band ~86 kDa in size corresponding to Ezh1 by western blotting in the appropriate cell lysate or extract. Testing using positive control NIH/3T3 nuclear extract p/n W10-001-A74.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	Affinity purified Anti-EZH1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide near the internal portion of human EZH1 protein.
Preservative	0.01% (w/v) Sodium Azide

Anti-EZH1 (RABBIT) Antibody - Additional Information**Gene ID** 2145**Other Names**
2145**Purity**

Anti-EZH1 is directed against human EZH1 at an internal position. This product is an affinity purified antibody produced by immunoaffinity chromatography using peptide coupled to agarose beads. A BLAST analysis was used to suggest reactivity with this protein in mouse, bovine, and orangutan species based on 100% homology for the immunogen sequence.

Storage Condition

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-EZH1 (RABBIT) Antibody - 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.

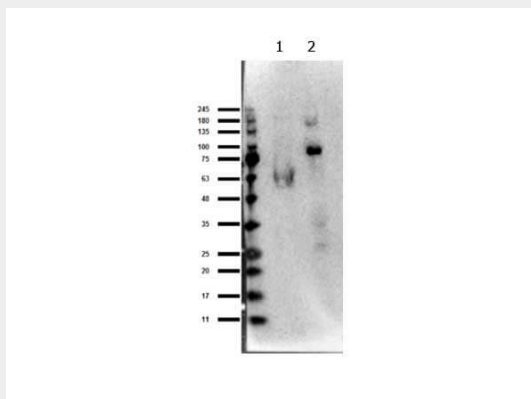
Cellular Location

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

Anti-EZH1 (RABBIT) 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-EZH1 (RABBIT) Antibody - Images

Western Blot of Rabbit anti-Ezh1 antibody. Marker: Opal Pre-stained ladder (p/n MB-210-0500). Lane 1: NIH/3T3 WCL (p/n W10-000-358). Lane 2: NIH/3T3 nuclear extract (p/n W10-001-A74).

Load: 10 µg per lane. Primary antibody: Ezh1 antibody at 1:1,000 for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody (p/n 611-103-122) at 1:70,000 for 60 min at RT. Blocking Buffer: (p/n MB-070) for 30 min at RT. Predicted/Observed size: 86 kDa for Ezh1 in lane 2 NIH/3T3 nuclear extract (p/n W10-001-A74).

Anti-EZH1 (RABBIT) Antibody - Background

Anti-Ezh1 Antibody was designed, produced, and validated as part of the Joy Cappel Young Investigator Award (JCYIA). Anti-EZH1 Antibody detects human EZH1. Polycomb group (PcG) proteins are essential epigenetic regulators in normal tissue homeostasis and are involved in transcriptional repression. The PcG members Ezh2 and Ezh1 are important determinants of embryonic stem cell identity, and the transcript levels of these histone methyltransferases are inversely correlated during development. Recent studies have shown that EZH1 also has histone H3K27 methyltransferase activity and binds to an overlapping subset of genes. EZH1 and EZH2 have different expression patterns. EZH2 is found in actively proliferating cells, whereas EZH1 expression is higher in nonproliferative adult tissues. EZH1 partially compensates for the loss of EZH2, as shown in cells lacking only Ezh2. In mice, EZH1 is a regulator of homeotic gene expression implicated in the assembly of repressive protein complexes in chromatin. Anti-EZH1 Antibody is ideal for investigators studying pathogenesis of hematological malignancies.