

Goat Anti-EZH1 Antibody
Peptide-affinity purified goat antibody
Catalog # AF1388a**Specification**

Goat Anti-EZH1 Antibody - Product Information

Application	WB
Primary Accession	O92800
Other Accession	NP_001982 , 2145 , 14055 (mouse)
Reactivity	Human
Predicted	Mouse, Cow
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	85271

Goat Anti-EZH1 Antibody - Additional Information**Gene ID** 2145**Other Names**

Histone-lysine N-methyltransferase EZH1, 2.1.1.43, ENX-2, Enhancer of zeste homolog 1, EZH1, KIAA0388

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-EZH1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-EZH1 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

Goat Anti-EZH1 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](#)

Goat Anti-EZH1 Antibody - Images



AF1388a (2 µg/ml) staining of lysate of cell line MOLT4 (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-EZH1 Antibody - Background

EZH1 is a component of a noncanonical Polycomb repressive complex-2 (PRC2) that mediates methylation of histone H3 (see MIM 602812) lys27 (H3K27) and functions in the maintenance of embryonic stem cell pluripotency and plasticity (Shen et al., 2008 [PubMed 19026780]).

Goat Anti-EZH1 Antibody - References

Ezh1 and Ezh2 maintain repressive chromatin through different mechanisms. Margueron R, et al. Mol Cell, 2008 Nov 21. PMID 19026781.

EZH1 mediates methylation on histone H3 lysine 27 and complements EZH2 in maintaining stem cell identity and executing pluripotency. Shen X, et al. Mol Cell, 2008 Nov 21. PMID 19026780.

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New insights into BS69 functions. Velasco G, et al. J Biol Chem, 2006 Jun 16. PMID 16565076.

The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Gerhard DS, et al. Genome Res, 2004 Oct. PMID 15489334.