

### Goat Anti-EZH1 Antibody

Peptide-affinity purified goat antibody Catalog # AF1388a

### Specification

# **Goat Anti-EZH1 Antibody - Product Information**

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, E <u>Q92800</u> <u>NP\_001982</u>, <u>2145</u>, <u>14055 (mouse)</u> Human Mouse Goat Polyclonal 100ug/200ul IgG 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

**Dilution** WB~~1:1000 E~~N/A

Format

0.5 mg lgG/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 Cytomety
- <u>Cell Culture</u>

#### Goat Anti-EZH1 Antibody - Images

250kDa 150kDa 100kDa	
75kDa	
50kDa	
37kDa	
25kDa	
20kDa	
15kDa	

AF1388a (2  $\mu$ g/ml) staining of lysate of cell line MOLT4 (35  $\mu$ g 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. Toward a confocal subcellular atlas of the human proteome. Barbe L, et al. Mol Cell Proteomics, 2008 Mar. PMID 18029348.

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.