

Catalog # AP21106a

(Mouse) Eed Antibody (N-term) Purified Rabbit Polyclonal Antibody (Pab)

Specification

(Mouse) Eed Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW

WB,E <u>O921E6</u> <u>O75530</u>, <u>O5ZKH3</u>, <u>O3SZ25</u> Mouse Bovine, Chicken, Human Rabbit Polyclonal Rabbit IgG 50198

(Mouse) Eed Antibody (N-term) - Additional Information

Gene ID 13626

Other Names Polycomb protein EED, Eed

Target/Specificity

This mouse Eed antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 40-74 amino acids from the N-terminal region of mouse Eed.

Dilution WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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 (Mouse) Eed Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

(Mouse) Eed Antibody (N-term) - Protein Information

Name Eed

Function Polycomb group (PcG) protein. Component of the PRC2/EED-EZH2 complex, which



methylates 'Lys-9' and 'Lys-27' of histone H3, leading to transcriptional repression of the affected target gene. Also recognizes 'Lys-26' trimethylated histone H1 with the effect of inhibiting PRC2 complex methyltransferase activity on nucleosomal histone H3 'Lys-27', whereas H3 'Lys-27' recognition has the opposite effect, enabling the propagation of this repressive mark (By similarity). The PRC2/EED-EZH2 complex may also serve as a recruiting platform for DNA methyltransferases, thereby linking two epigenetic repression systems (By similarity). Genes repressed by the PRC2/EED- EZH2 complex include HOXA7, HOXB6 and HOXC8. Plays a role in X chromosome inactivation (XCI), in which one of the two X chromosomes in female mammals is transcriptionally silenced to equalize X-linked gene dosage with XY males. Required for stable maintenance of XCI in both embryonic and extraembryonic tissues. May prevent transcriptional activation of facultative heterochromatin during differentiation. Required for development of secondary trophoblast giant cells during placental development. May regulate hippocampal synaptic plasticity in the developing brain.

Cellular Location

Nucleus. Chromosome. Note=Localizes to the inactive X chromosome in cells of the early embryo and in stem cells of the extraembryonic trophectoderm lineage. Recruitment to the inactive X-chromosome requires XIST

Tissue Location

Expressed in brain, heart, kidney, liver, lung, muscle, ovary, spleen and testis. Expressed throughout the brain

(Mouse) Eed Antibody (N-term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

(Mouse) Eed Antibody (N-term) - Images





Western blot analysis of lysate from mouse brain tissue lysate, using Eed Antibody (N-term)(Cat. #AP21106a). AP21106a was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.

(Mouse) Eed Antibody (N-term) - Background

Polycomb group (PcG) protein. Component of the PRC2/EED- EZH2 complex, which methylates 'Lys-9' and 'Lys-27' of histone H3, leading to transcriptional repression of the affected target gene. Also recognizes 'Lys-26' trimethylated histone H1 with the effect of inhibiting PRC2 complex methyltransferase activity on nucleosomal histone H3 'Lys-27', whereas H3 'Lys-27' recognition has the opposite effect, enabling the propagation of this repressive mark (By similarity). The PRC2/EED-EZH2 complex may also serve as a recruiting platform for DNA methyltransferases, thereby linking two epigenetic repression systems (By similarity). Genes repressed by the PRC2/EED-EZH2 complex include HOXA7, HOXB6 and HOXC8. Plays a role in X chromosome inactivation (XCI), in which one of the two X chromosomes in female mammals is transcriptionally silenced to equalize X-linked gene dosage with XY males. Required for stable maintenance of XCI in both embryonic and extraembryonic tissues. May prevent transcriptional activation of facultative heterochromatin during differentiation. Required for development of secondary trophoblast giant cells during placental development. May regulate hippocampal synaptic plasticity in the developing brain.

(Mouse) Eed Antibody (N-term) - References

Shumacher A., et al. Nature 383:250-253(1996). Schumacher A., et al. Nature 384:648-648(1996). Denisenko O.N., et al. Mol. Cell. Biol. 17:4707-4717(1997). Carninci P., et al. Science 309:1559-1563(2005). Denisenko O.N., et al. Mol. Cell. Biol. 18:5634-5642(1998).