

**(Mouse) Eed Antibody (Center)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP21210c**

**Specification**

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**(Mouse) Eed Antibody (Center) - Product Information**

Application	<b>WB, IHC-P,E</b>
Primary Accession	<a href="#">O921E6</a>
Reactivity	<b>Human, Mouse</b>
Host	<b>Rabbit</b>
Clonality	<b>polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Calculated MW	<b>50198</b>

**(Mouse) Eed Antibody (Center) - 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 269-303 amino acids from the Central region of mouse Eed.

**Dilution**

WB~~1:1000

IHC-P~~1:25

**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 (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**(Mouse) Eed Antibody (Center) - 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

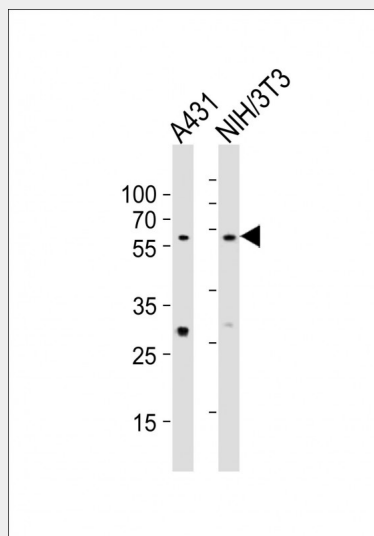
Expressed in brain, heart, kidney, liver, lung, muscle, ovary, spleen and testis. Expressed throughout the brain

#### (Mouse) Eed Antibody (Center) - Protocols

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

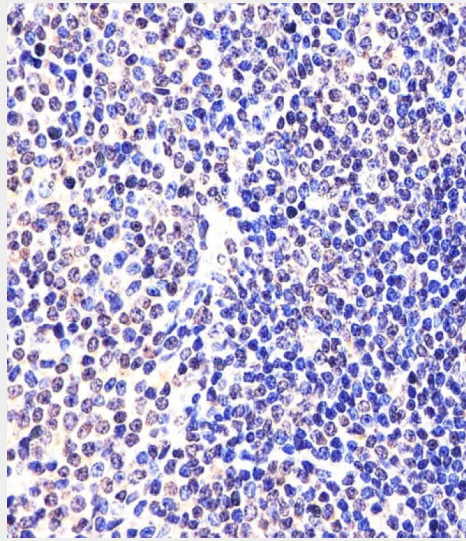
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### (Mouse) Eed Antibody (Center) - Images



All lanes : Anti-Eed Antibody (Center) at 1:1000 dilution Lane 1: A431 whole cell lysates Lane 2:

NIH/3T3 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 50 kDa Blocking/Dilution buffer: 5% NFD/MTBST.



AP21210c staining (Mouse) Eed in Mouse spleen tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hour at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

#### **(Mouse) Eed Antibody (Center) - 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 (Center) - 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).
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