

### (Mouse) Eed Blocking Peptide (N-term)

Synthetic peptide Catalog # BP21106a

### **Specification**

(Mouse) Eed Blocking Peptide (N-term) - Product Information

Primary Accession Other Accession <u>Q921E6</u>

075530, Q5ZKH3,

**Q3SZ25** 

(Mouse) Eed Blocking Peptide (N-term) - Additional Information

**Gene ID 13626** 

**Other Names** 

Polycomb protein EED, Eed

Target/Specificity

The synthetic peptide sequence is selected from aa 40-54 of HUMAN Eed

#### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

(Mouse) Eed Blocking Peptide (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

# (Mouse) Eed Blocking Peptide (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 Blocking Peptide (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).



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#### **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 Blocking Peptide (N-term) - Protocols

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

• Blocking Peptides