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EED Antibody
Catalog # ASC11536

Specification

EED Antibody - Product Information

Application	**WB, IF, E**
Primary Accession	O75530
Other Accession	NP_003788, 24041020
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**49 kDa KDa**
Application Notes	**EED antibody can be used for detection of EED by Western blot at 1 µg/mL. For immunofluorescence start at 20 µg/mL.**

EED Antibody - Additional Information

Gene ID **8726**

Target/Specificity
EED; Four alternatively spliced transcript variants have been observed.

Reconstitution & Storage
EED antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions
EED Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

EED Antibody - Protein Information

Name EED (HGNC:3188)

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. The PRC2/EED- EZH2 complex may also serve as a recruiting platform for DNA methyltransferases, thereby linking two epigenetic repression systems. Genes repressed by the PRC2/EED-EZH2 complex include HOXC8, HOXA9, MYT1 and CDKN2A.

Cellular Location
Nucleus. Chromosome. Note=Transiently colocalizes with XIST at inactive X chromosomes

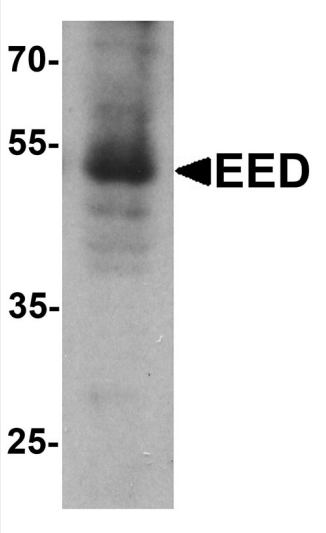
Tissue Location
Expressed in brain, colon, heart, kidney, liver, lung, muscle, ovary, peripheral blood leukocytes, pancreas, placenta, prostate, spleen, small intestine, testis, thymus and uterus. Appears to be overexpressed in breast and colon cancer

EED Antibody - Protocols

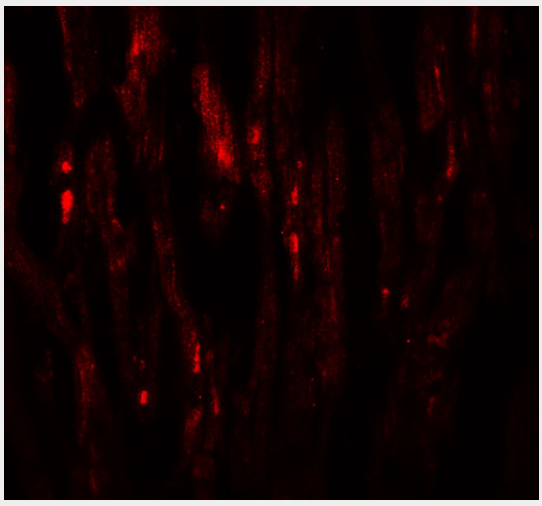
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

EED Antibody - Images



Western blot analysis of EED in human heart tissue lysate with Eed antibody at 1 µg/mL.



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Immunofluorescence of EED in human heart tissue with EED antibody at 20 µg/mL.

EED Antibody - Background

EED Antibody: The EED protein (WAIT-1 or WD protein associated with integrin cytoplasmic tails-1), also called embryonic ectoderm development, is a member of the superfamily of WD-40 repeat proteins and widely conserved polycomb group (PcG) family of proteins. The polycomb group (PcG) is a large and evolutionarily conserved set of genes whose products act in multimeric complexes to modify histones, which are then thought to cause stable and heritable states of transcriptional repression. EED shuttles between the nucleus and the plasma membrane and can interact with the cytoplasmic tail of integrin β7 subunit. EED exerted an antiviral activity at the late stage of HIV-1 replication.

EED Antibody - References

Rietzler M, Bittner M, Kolanus W, et al. The human WD repeat protein WAIT-1 specifically interacts with the cytoplasmic tails of beta7-integrins. J. Biol. Chem. 1998; 273:27459-66.
Brock HW and Fisher CL. Maintenance of gene expression patterns. Dev Dyn. 2005; 232:633-55.
Levine SS, King IF, Kingston RE, et al. Division of labor in polycomb group repression. Trends Biochem. Sci. 2004; 29: 478-85.
Van der Vlag J and Otte AP. Transcriptional repression mediated by the human Polycomb-group protein EED involves histone deacetylation. Nat. Genet.1999; 23:474-8.