

EDR / PEG10 Antibody (clone 4C10A7)
Mouse Monoclonal Antibody
Catalog # ALS13160**Specification****EDR / PEG10 Antibody (clone 4C10A7) - Product Information**

Application	IHC
Primary Accession	Q86TG7
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	80kDa KDa

EDR / PEG10 Antibody (clone 4C10A7) - Additional Information**Gene ID** 23089**Other Names**

Retrotransposon-derived protein PEG10, Embryonal carcinoma differentiation-regulated protein, Mammalian retrotransposon-derived protein 2, Myelin expression factor 3-like protein 1, MEF3-like protein 1, Paternally expressed gene 10 protein, Retrotransposon gag domain-containing protein 3, Retrotransposon-derived gag-like polyprotein, Ty3/Gypsy-like protein, PEG10, EDR, KIAA1051, MAR2, MART2, MEF3L1, RGAG3

Target/Specificity

Human PEG10

Reconstitution & Storage

Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions

EDR / PEG10 Antibody (clone 4C10A7) is for research use only and not for use in diagnostic or therapeutic procedures.

EDR / PEG10 Antibody (clone 4C10A7) - Protein Information**Name** PEG10 {ECO:0000303|PubMed:11318613, ECO:0000312|HGNC:HGNC:14005}**Function**

Retrotransposon-derived protein that binds its own mRNA and self-assembles into virion-like capsids (PubMed:34413232). Forms virion-like extracellular vesicles that encapsulate their own mRNA and are released from cells, enabling intercellular transfer of PEG10 mRNA (PubMed:34413232). Binds its own mRNA in the 5'-UTR region, in the region near the boundary between the nucleocapsid (NC) and protease (PRO) coding sequences and in the beginning of the 3'-UTR region (PubMed:34413232). Involved in placenta formation: required for trophoblast stem cells differentiation (By similarity). Involved at

the immediate early stage of adipocyte differentiation (By similarity). Overexpressed in many cancers and enhances tumor progression: promotes cell proliferation by driving cell cycle progression from G0/G1 (PubMed:12810624, PubMed:16423995, PubMed:26235627, PubMed:28193232). Enhances cancer progression by inhibiting the TGF-beta signaling, possibly via interaction with the TGF-beta receptor ACVRL1 (PubMed:15611116, PubMed:26235627, PubMed:30094509). May bind to the 5'-GCCTGTCTTT-3' DNA sequence of the MB1 domain in the myelin basic protein (MBP) promoter; additional evidences are however required to confirm this result (By similarity).

Cellular Location

Extracellular vesicle membrane. Cytoplasm. Nucleus Note=Forms virion-like extracellular vesicles that are released from cells (PubMed:34413232). Detected predominantly in the cytoplasm of breast and prostate carcinomas, in hepatocellular carcinoma (HCC) and B-cell chronic lymphocytic leukemia (B-CLL) cells and in the Hep-G2 cell line (PubMed:12810624).

Tissue Location

Expressed in the cytotrophoblast layer but not in the overlying syncytiotrophoblast of the placenta. Expressed in prostate and breast carcinomas but not in normal breast and prostate epithelial cells. Expressed in the Hep-G2 cell line (at protein level) Expressed in brain, liver, spleen, kidney, thymus, lung, ovary, testis, reactive lymph node, skeletal muscle, adipose tissue and placenta Expressed in pancreatic and hepatocellular carcinomas (HCC)

Volume

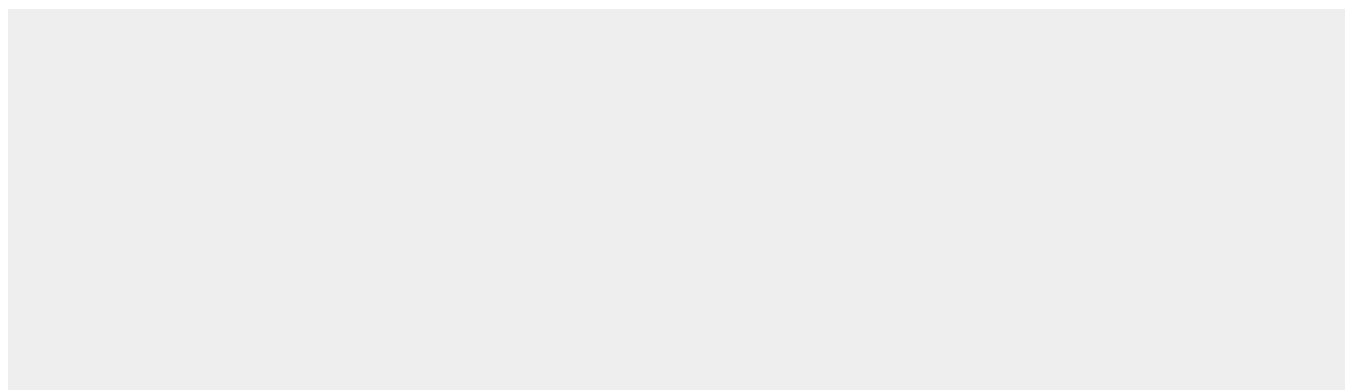
50 µl

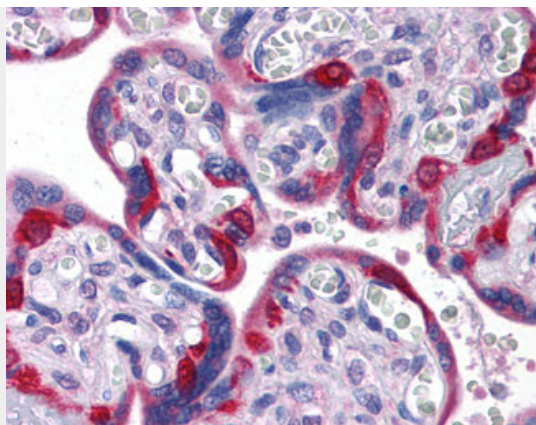
EDR / PEG10 Antibody (clone 4C10A7) - Protocols

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](#)

EDR / PEG10 Antibody (clone 4C10A7) - Images





Anti-PEG10 antibody IHC of human placenta.

EDR / PEG10 Antibody (clone 4C10A7) - Background

Prevents apoptosis in hepatocellular carcinoma (HCC) cells through interaction with SIAH1, a mediator of apoptosis. May also have a role in cell growth promotion and hepatoma formation. Inhibits the TGF-beta signaling by interacting with the TGF-beta receptor ALK1. When overexpressed, induces the formation of cellular extension, such as filipodia in association with ALK1. Involved at the immediate early stage of adipocyte differentiation (By similarity). May bind to the 5'-GCCTGTCTTT-3' DNA sequence of the MB1 domain in the myelin basic protein (MBP) promoter (By similarity).

EDR / PEG10 Antibody (clone 4C10A7) - References

Ono R.,et al.Genomics 73:232-237(2001).
Nagase T.,et al.DNA Res. 6:63-70(1999).
Ohara O.,et al.Submitted (JUN-1999) to the EMBL/GenBank/DDBJ databases.
Satoh S.,et al.Submitted (SEP-2002) to the EMBL/GenBank/DDBJ databases.
Hillier L.W.,et al.Nature 424:157-164(2003).