



# PEG10 mouse mAb

<b>Catalog No</b>	YP-Ab-01096
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human
<b>Applications</b>	WB;IP
<b>Gene Name</b>	peg10
<b>Protein Name</b>	
<b>Immunogen</b>	Purified recombinant human PEG10 protein fragments expressed in E.coli.
<b>Specificity</b>	This antibody detects endogenous levels of PEG10 and does not cross-react with related proteins.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Monoclonal, Mouse
<b>Purification</b>	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	wb 1:1000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	AA407948;Edr;Embryonal carcinoma differentiation regulated;Embryonal carcinoma differentiation-regulated protein;HB 1;HB1;KIAA1051;Mammalian retrotransposon-derived protein 2;Mar2;Mart2;MEF3 like 1;MEF3-like protein 1;MEF3L;MEF3L1;MyEF 3;Myelin expression factor 3-like protein 1;Paternally expressed 10;Paternally expressed gene 10 ORF1;Paternally expressed gene 10 protein;Peg10;PEG10 protein;PEG10_HUMAN;Putative uncharacterized protein PEG10;Retrotransposon gag domain containing 3;Retrotransposon gag domain-containing protein 3;Retrotransposon-derived gag-like polyprotein; Retrotransposon-derived protein PEG10;RGAG3;Ty3/Gypsy-like protein.
<b>Observed Band</b>	55kD
<b>Cell Pathway</b>	Extracellular vesicle membrane . Cytoplasm . Nucleus . 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). .
<b>Tissue Specificity</b>	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).

**Function**

alternative products:The ribosomal frameshifting efficiency yield up to 66% of protein RF1/RF2 compared to RF1,developmental stage:Expressed in placenta during the first trimester of gestation (at protein level). In placenta, down-regulated at early hypoxic phase, and highly activated at 11-12 week of gestation.,function: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.,induction:

**Background**

This is a paternally expressed imprinted gene that is thought to have been derived from the Ty3/Gypsy family of retrotransposons. It contains two overlapping open reading frames, RF1 and RF2, and expresses two proteins: a shorter, gag-like protein (with a CCHC-type zinc finger domain) from RF1; and a longer, gag/pol-like fusion protein (with an additional aspartic protease motif) from RF1/RF2 by -1 translational frameshifting (-1 FS). While -1 FS has been observed in RNA viruses and transposons in both prokaryotes and eukaryotes, this gene represents the first example of -1 FS in a eukaryotic cellular gene. This gene is highly conserved across mammalian species and retains the heptanucleotide (GGGAAAC) and pseudoknot elements required for -1 FS. It is expressed in adult and embryonic tissues (most notably in placenta) and reported to have a role in cell proliferation, differentiation and apoptosis.

**matters needing attention**

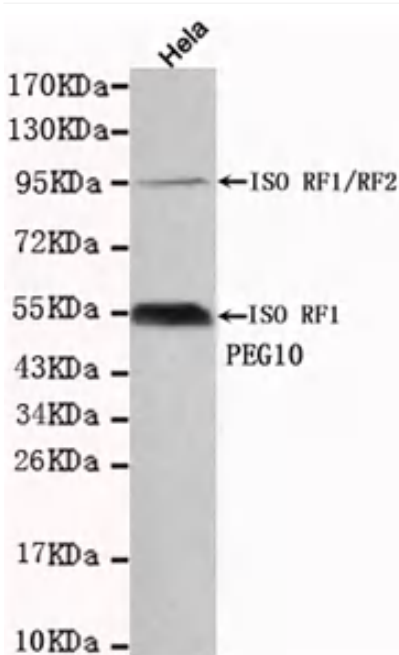
Avoid repeated freezing and thawing!

**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



## Products Images



Western blot detection of PEG10 in HeLa cell lysates using PEG10 mouse mAb (1:1000 diluted). Predicted band size:55KDa.Observed band size:55KDa,95KDa.

Ctrl IgG IP: - + -  
PEG10 IP: - - +

Immunoprecipitation analysis of HeLa cell lysates using PEG10 mouse mAb.

