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Rabbit Anti-PEG10/AF350 Conjugated antibody

SL1084R-AF350

Product Name	Anti-PEG10/AF350
Chinese Name	AF350 标记的肝癌高表达基因抗体
Alias	Paternally expressed gene 10; MyEF 3; AA407948; Edr; Embryonal carcinoma differentiation regulated; HB 1; HB1; KIAA1051; Mar2; Mart2; MEF3 like 1; MEF3L; MEF3L1; Paternally expressed 10; Paternally expressed gene 10 ORF1; PEG10 protein; Putative uncharacterized protein PEG10; Retrotransposon gag domain containing 3; RGAG3; PEG10_HUMAN; 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; EDR.
Research Area	Tumour Cell biology
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human,Mouse(predicted:Rat,Dog,Pig,Cow)
Applications	IF=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	78kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human PEG10 (301-400aa)
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and

for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Product Detail

background:
This is a paternally expressed imprinted gene that encodes transcripts containing two overlapping open reading frames (ORFs), RF1 and RF1/RF2, as well as retroviral-like slippage and pseudoknot elements, which can induce a -1 nucleotide frame-shift. ORF1 encodes a shorter isoform with a CCHC-type zinc finger motif containing a sequence characteristic of gag proteins of most retroviruses and some retrotransposons. The longer isoform is the result of -1 translational frame-shifting leading to translation of a gag/pol-like protein combining RF1 and RF2. It contains the active-site consensus sequence of the protease domain of pol proteins. Additional isoforms resulting from alternatively spliced transcript variants, as well as from use of upstream non-AUG (CUG) start codon, have been reported for this gene. Increased expression of this gene is associated with hepatocellular carcinomas. [provided by RefSeq, May 2010].

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.

Subunit:
Interacts with ALK1, SIAH1 and SIAH2.

Subcellular Location:
Nucleus. Cytoplasm. Note=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. Colocalized with ALK1.

Tissue Specificity:
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 HepG2 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).

Post-translational modifications:
Isoform RF1/RF2 undergoes proteolytic cleavage.

Similarity:
Contains 1 CCHC-type zinc finger.

Database links:

Entrez Gene: 23089 Human

Entrez Gene: 170676 Mouse

Entrez Gene: 654416 Pig

Omim: 609810 Human

SwissProt: Q86TG7 Human

SwissProt: Q7TN75 Mouse

Unigene: 147492 Human

Unigene: 320575 Mouse

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

PEG10 是一个癌基因,在 Tumour 癌变过程中起重要作用。PEG10 在原发性肝癌中表达明显上调，体外细胞试验证明 PEG10 影响细胞周期，可促进细胞生长，在肝细胞癌变过程中起重要作用。