

Product datasheet for UM500056CF

OriGene Technologies, Inc.

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alpha 1 Fetoprotein (AFP) Mouse Monoclonal Antibody [Clone ID: UMAB66]

Product data:

Product Type: Primary Antibodies

Clone Name: UMAB66

Applications: 10k-ChIP, IF, IHC, WB

Recommended Dilution: IHC 1:100, IF 1:100

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human AFP (NP_001125) produced in HEK293T

cell.

Formulation: Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)

Reconstitution Method: For reconstitution, we recommend adding 100uL distilled water to a final antibody

concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 66.3 kDa

Gene Name: alpha fetoprotein

Database Link: NP 001125

Entrez Gene 174 Human

P02771





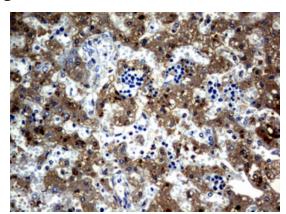
Background:

This gene encodes alpha-fetoprotein, a major plasma protein produced by the yolk sac and the liver during fetal life. Alpha-fetoprotein expression in adults is often associated with hepatoma or teratoma. However, hereditary persistance of alpha-fetoprotein may also be found in individuals with no obvious pathology. The protein is thought to be the fetal counterpart of serum albumin, and the alpha-fetoprotein and albumin genes are present in tandem in the same transcriptional orientation on chromosome 4. Alpha-fetoprotein is found in monomeric as well as dimeric and trimeric forms, and binds copper, nickel, fatty acids and bilirubin. The level of alpha-fetoprotein in amniotic fluid is used to measure renal loss of protein to screen for spina bifida and anencephaly. [provided by RefSeq, Jul 2008]

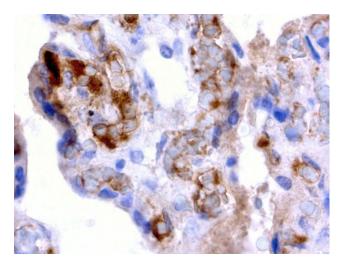
Synonyms: AFPD; FETA; HPAFP

Protein Families: Druggable Genome, Secreted Protein

Product images:

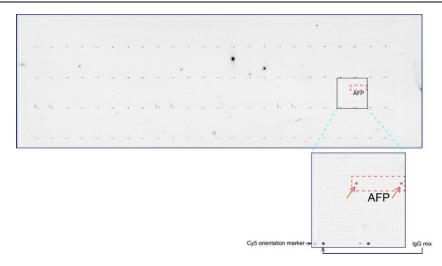


Immunohistochemical staining of paraffinembedded human embryonic liver tissue using anti-AFP mouse monoclonal antibody. Heatinduced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min in pressure chamber/cooker. [UM500056] diluted 1:100 and detection shown with HRP enzyme and DAB chromogen. Strong cytoplasmic and membranous staining is seen in the hepatocytes.

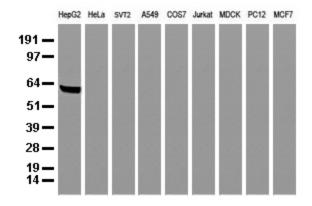


Immunohistochemical staining of paraffinembedded human placenta using anti-AFP clone UMAB66 mouse monoclonal antibody at 1:200 dilution of 0.8mg/mL and detection with Polink2 Broad HRP DAB. [UM500056] requires heatinduced epitope retrieval with citrate pH6.0 at 95-100C 20 minutes. The image shows strong membranous, cytoplasmic and rare nuclear protein in the trophoblast cells. This protein is also seen as secreted protein.

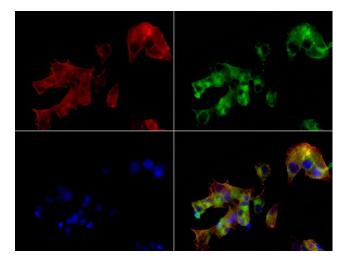




OriGene overexpression protein microarray chip was immunostained with UltraMAB anti-AFP mouse monoclonal antibody ([UM500056]). The positive reactive proteins are highlighted with two red arrows in the enlarged subarray. All the positive controls spotted in this subarray are also labeled for clarification.



Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-AFP monoclonal antibody (Clone UMAB66).



Immunofluorescent staining of HepG2 cells using AFP mouse monoclonal antibody ([UM500056], green). Actin filaments were labeled with TRITC-phalloidin (red), and nuclear with DAPI (blue). The three-color overlay image is located at the bottom-right corner.