

# AFP (Alpha Fetoprotein) (Hepatocellular/Germ Cell Tumor Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone MBS-12] Catalog # AH11148

## **Product Information**

Application	IHC, IF, FC
Primary Accession	<u>P02771</u>
Other Accession	<u>174, 518808</u>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Clone Names	MBS-12
Calculated MW	68678

#### **Additional Information**

Gene ID	174
Other Names	Alpha-fetoprotein, Alpha-1-fetoprotein, Alpha-fetoglobulin, AFP, HPAFP
Application Note	IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	AFP (Alpha Fetoprotein) (Hepatocellular/Germ Cell Tumor Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Protein Information**

Name	AFP
Synonyms	HPAFP
Function	Binds copper, nickel, and fatty acids as well as, and bilirubin less well than, serum albumin. Only a small percentage (less than 2%) of the human AFP shows estrogen-binding properties.
Cellular Location	Secreted.
Tissue Location	Plasma. Synthesized by the fetal liver and yolk sac

# Background

It recognizes an oncofetal glycoprotein with a single chain of 70kDa, which is identified as alpha fetoprotein (AFP). This MAb is highly specific to AFP and shows no cross-reaction with other oncofetal antigens or serum albumin. The yolk sac and the liver produce AFP during fetal life. AFP expression in adults is often associated with hepatoma or teratoma. However, hereditary persistence 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 AFP and albumin genes are present in tandem in the same transcriptional orientation on chromosome 4. AFP is found in monomeric as well as dimeric and trimeric forms, and binds copper, nickel, fatty acids and bilirubin. The level of AFP in amniotic fluid is used to measure renal loss of protein to screen for spinal bifida and anencephaly.  $\Box$ 

## References

Stefanova, I., Horejs [] V., Kristofov [] H., Angelisov [] P., Zizkovsk [] V. and Hilgert, I. 1988. Monoclonal antibodies against human  $\alpha$ -fetoprotein. Exploitation of an unusual calcium-dependent interaction with the antigen for analytical and preparative purposes. J. Immunol. Methods 111: 67-73. | Lafuste, P., et al. 2002.  $\alpha$ -fetoprotein gene expression in early and full-term human trophoblast. Placenta 23: 600-612

#### Images



Formalin-fixed, paraffin-embedded human Fetal Liver stained with AFP Monoclonal Antibody (MBS-12).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.