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AFP Antibody

Catalog # ASC11178

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	P02771
Other Accession	NP_001125, 4501989
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	68678
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	AFP antibody can be used for detection of AFP by Western blot at 1 g/mL. Antibody can also be used for immunohistochemistry starting at 10 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	174
Other Names	Alpha-fetoprotein, Alpha-1-fetoprotein, Alpha-fetoglobulin, AFP, HPAFP
Target/Specificity	AFP;
Reconstitution & Storage	AFP antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	AFP Antibody 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

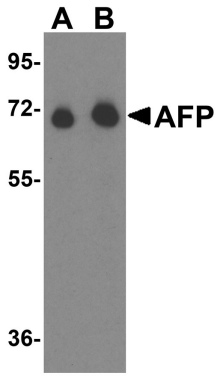
Background

AFP Antibody: Alpha-fetoprotein (AFP) is a major plasma protein produced by the yolk sac and the liver during fetal development. In adults, AFP expression is often associated with hepatoma or teratoma. However, hereditary persistance of AFP may also be found in individuals with no obvious pathology. AFP 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. AFP levels in amniotic fluid is used to measure renal loss of protein to screen for spina bifida and anencephaly.

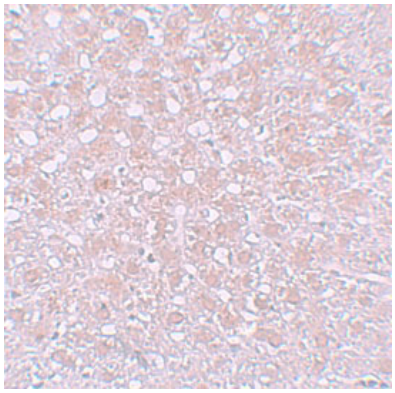
References

Lafuste P, Robert B, Mondon F, et al. Alpha-fetoprotein gene expression in early and full-term human trophoblast. Placenta2002; 23:600-12.
Walhof CM, Van Sonderen L, Voute PA, et al. Half-life of alpha-fetoprotein in patients with a teratoma, endodermal sinus tumor, or hepatoblastoma. Pediatr. Hematol. Oncol.1988; 5:217-27.
Nishio H, Heiskanen M, Palotie A, et al. Tandem arrangement of the human serum albumin multigene family in the sub-centromeric region of 4q: evolution and chromosomal direction of transcription. J. Mol. Biol.1996; 259:113-9.
Deutsch HF. Chemistry and biology of alpha-fetoprotein. Adv. Cancer Res.1991; 56:253-312

Images

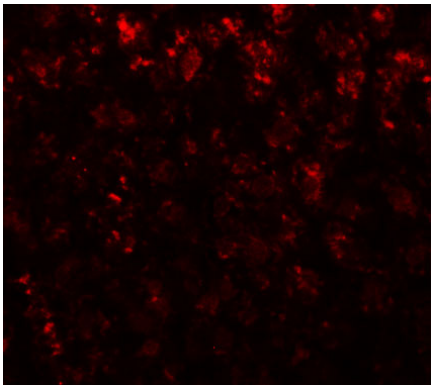


Western blot analysis of AFP in fetal human liver tissue lysate with AFP antibody at (A) 1 µg/mL and (B) 2 µg/mL.



Immunohistochemistry of AFP in rat liver tissue with AFP antibody at 10 µg/mL.

Immunofluorescence of AFP in rat liver tissue with AFP antibody at 20 µg/mL.



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