

## **AFP Antibody (Center)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1430c

### **Specification**

# AFP Antibody (Center) - Product Information

Application IHC-P, WB,E
Primary Accession P02771
Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 300-329

# AFP Antibody (Center) - Additional Information

#### Gene ID 174

#### **Other Names**

Alpha-fetoprotein, Alpha-1-fetoprotein, Alpha-fetoglobulin, AFP, HPAFP

#### Target/Specificity

This AFP antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 300-329 amino acids from the Central region of human AFP.

#### **Dilution**

IHC-P~~1:10~50 WB~~1:1000

E~~Use at an assay dependent concentration.

## **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

# **Precautions**

AFP Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# AFP Antibody (Center) - Protein Information

### Name AFP

#### Synonyms HPAFP





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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** 

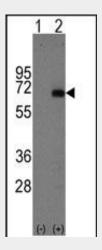
Plasma. Synthesized by the fetal liver and yolk sac

# **AFP Antibody (Center) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

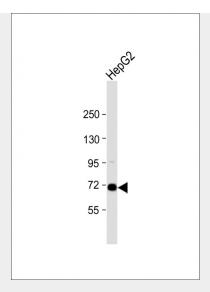
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# AFP Antibody (Center) - Images

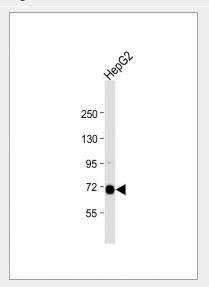


Western blot analysis of AFP (arrow) using rabbit polyclonal AFP Antibody (Center) (Cat.#AP1430c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the AFP gene (Lane 2) (Origene Technologies).

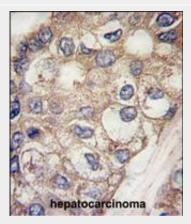




Anti-AFP Antibody (Center) at 1:1000 dilution + HepG2 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 69 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Anti-AFP Antibody (Center) at 1:1000 dilution + HepG2 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 69 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with AFP antibody



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(Center) (Cat.#AP1430c), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

## AFP Antibody (Center) - Background

Alpha-fetoprotein (AFP) is 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.

## AFP Antibody (Center) - References

Yamashita, T., Cancer Res. 68 (5), 1451-1461 (2008) Chen, G.G., Eur J Surg Oncol 33 (7), 882-886 (2007) Cajaiba, M.M., Pediatr. Dev. Pathol. 10 (3), 233-238 (2007)