

For Research Use Only

# AFP Polyclonal antibody

Catalog Number: 14550-1-AP

Featured Product

122 Publications



## Basic Information

### Catalog Number:

14550-1-AP

### Size:

150ul, Concentration: 650 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG6089

### GenBank Accession Number:

BC027881

### GeneID (NCBI):

174

### UNIPROT ID:

P02771

### Full Name:

alpha-fetoprotein

### Calculated MW:

69 kDa

### Observed MW:

68-72 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:2000-1:10000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:250-1:1000

## Applications

### Tested Applications:

WB, IHC, IP, ELISA

### Cited Applications:

WB, IHC, IF, CoIP

### Species Specificity:

human

### Cited Species:

human, mouse, rat, goat

### Positive Controls:

**WB**: BxPC-3 cells, HepG2 cells, HuH-7 cells, L02 cells, HepG2 cells, human placenta tissue

**IP**: HepG2 cells,

**IHC**: human ovary cancer tissue, human liver cancer tissue, human ovary tumor tissue

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

AFP (Alpha-fetoprotein) is a major plasma protein in the fetus and its concentration is very low in the adult (PMID:24120489). AFP can be detected at abnormally high concentrations in hepatocellular carcinomas as well as in the plasma and ascitic fluid of adults with hepatoma, indicating that AFP can serve as a tumor marker (PMID: 18669658). AFP is also a glycosylated protein and based on its binding capability to lectin Lens Culinaris Agglutinin (LCA), and total AFP can be separated into three different glycoforms, AFP-L1, AFP-L2, and AFP-L3. Core-fucosylated form of AFP (AFP-L3) is a more specific indicator than total AFP for HCC (PMID: 33128033, 35458505)

## Notable Publications

Author	Pubmed ID	Journal	Application
Jian Sun	27714143	Nanoscale	
Shaling Li	36169092	Cancer Sci	IF
Masahiro Yamamoto	28964793	Am J Pathol	IHC

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

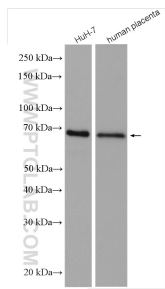
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

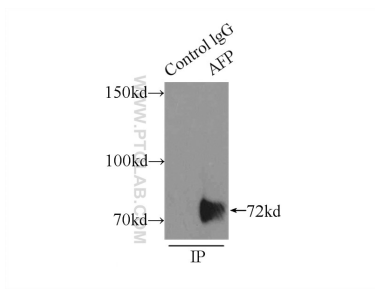
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

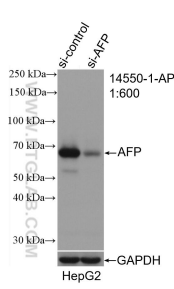
Selected Validation Data



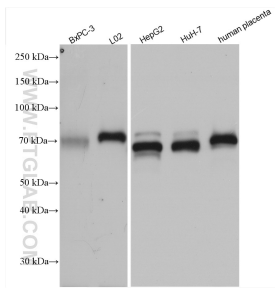
Various lysates were subjected to SDS PAGE followed by western blot with 14550-1-AP (AFP antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



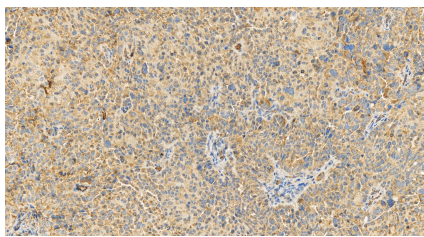
IP result of anti-AFP (IP:14550-1-AP, 5ug; Detection:14550-1-AP 1:1000) with HepG2 cells lysate 6000ug.



WB result of AFP antibody (14550-1-AP; 1:600; incubated at room temperature for 1.5 hours) with sh-Control and sh-AFP transfected HepG2 cells.



BxPC-3 cells were subjected to SDS PAGE followed by western blot with 14550-1-AP (AFP antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using 14550-1-AP (AFP antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).