

For Research Use Only

# AFP Recombinant antibody

Catalog Number: 81083-1-RR

Featured Product



## Basic Information

Catalog Number:

81083-1-RR

Size:

100ul, Concentration: 1000 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:

Protein A purification

CloneNo.:

2D17

Recommended Dilutions:

WB 1:5000-1:50000

IHC 1:50-1:500

## Applications

Tested Applications:

WB, IHC, ELISA

Species Specificity:

human

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

Positive Controls:

WB : HepG2 cells, HuH-7 cells, human placenta tissue

IHC : human liver cancer tissue, human colon cancer tissue

## 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)

## Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol

Aliquoting is unnecessary for -20°C storage

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

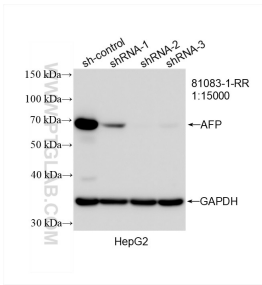
For technical support and original validation data for this product please contact:

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

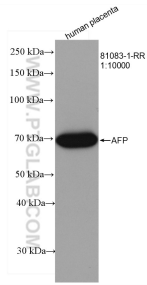
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

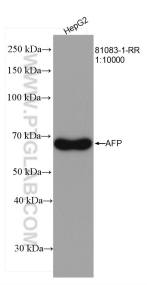
Selected Validation Data



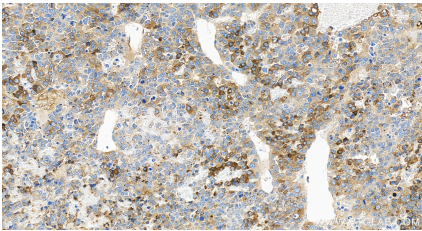
WB result of AFP antibody (81083-1-RR; 1:15000; incubated at room temperature for 1.5 hours) with sh-Control and sh-AFP transfected HepG2 cells.



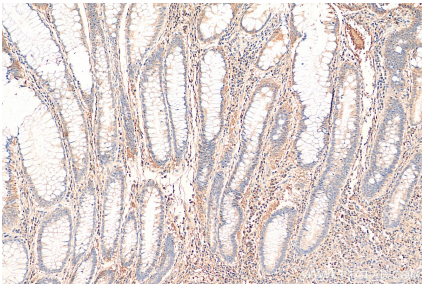
human placenta were subjected to SDS PAGE followed by western blot with 81083-1-RR (AFP antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



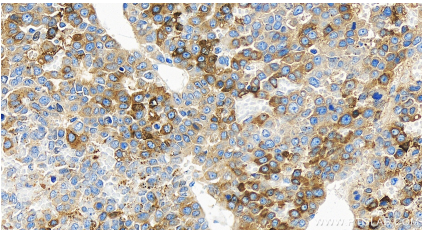
HepG2 cells were subjected to SDS PAGE followed by western blot with 81083-1-RR (AFP antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



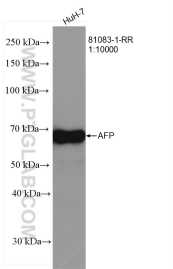
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 81083-1-RR (AFP antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



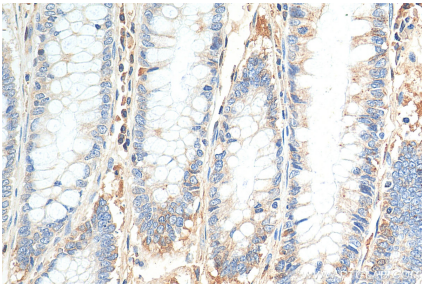
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 81083-1-RR (AFP antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



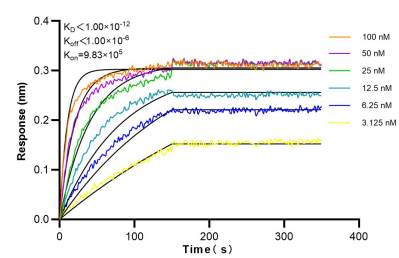
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 81083-1-RR (AFP antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



HuH-7 cells were subjected to SDS PAGE followed by western blot with 81083-1-RR (AFP antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 81083-1-RR (AFP antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 81083-1-RR against Human AFP were performed. The affinity constant is below 1 pM.