

For Research Use Only

# AFP Recombinant antibody

Catalog Number:82982-6-RR



## Basic Information

<b>Catalog Number:</b> 82982-6-RR	<b>GenBank Accession Number:</b> BC027881	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 174	<b>CloneNo.:</b> 230435E3
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P02771	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:300-1:1200
<b>Isotype:</b> IgG	<b>Full Name:</b> alpha-fetoprotein	
	<b>Calculated MW:</b> 69 kDa	
	<b>Observed MW:</b> 68 kDa	

## 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 :** human placenta tissue,

**IHC :** human liver 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 pH 7.3.

Aliquoting is unnecessary for -20°C storage

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

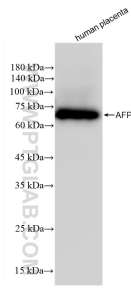
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free  
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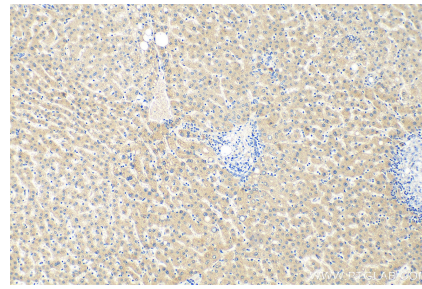
E: proteintech@ptglab.com  
W: ptglab.com

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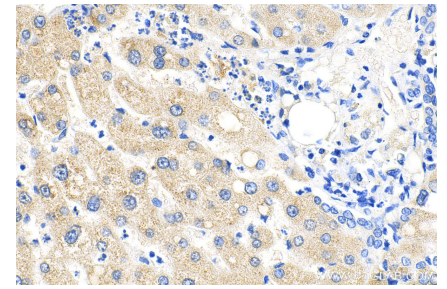
## Selected Validation Data



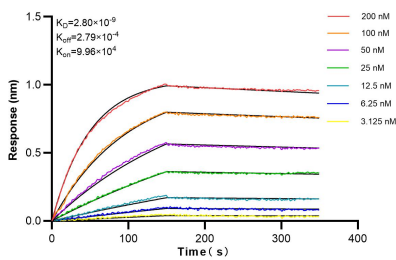
human placenta tissue were subjected to SDS PAGE followed by western blot with 82982-6-RR (AFP antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 82982-6-RR (AFP antibody) at dilution of 1:600 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 82982-6-RR (AFP antibody) at dilution of 1:600 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 82982-6-RR against Human AFP were performed. The affinity constant is 2.80 nM.