Anti-AFP Antibody [PD00-71]

HA721238

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	IHC-P, WB
Molecular Wt:	Predicted band size: 69 kDa
Clone number:	PD00-71

Description: Alpha-fetoprotein (AFP) is the most abundant plasma protein found in the human fetus. It is thought to be the fetal form of serum albumin. AFP binds to copper, nickel, fatty acids and bilirubin and is found in monomeric, dimeric and trimeric forms. Alpha-Fetoprotein (AFP) is synthesized by the cells of the embryonic yolk sac, fetal liver and fetal intestinal tract. This secretory protein is synthesized primarily in the fetal liver whereas expression is repressed in adult liver. Anti-AFP has been immunohistochemically demonstrated in hepatocellular carcinoma (HCC) and shows no immunoreactivity in normal liver. AFP levels decrease soon after birth. In abnormal tissues, expression of AFP has been demonstrated in hepatocellular carcinoma, hepatoid adenocarcinoma, germ cell tumors and particularly yolk sac tumor. The anti-AFP antibody may be useful for the identification of neoplastic liver diseases, yolk sac tumors and mixed germ cell tumors.

Immunogen: Recombinant full length protein corresponding to Human AFP.

Positive control: Human placenta tissue, human poorly differentiated hepatocellular carcinoma tissue, HepG2 cell lysates.

Subcellular location: Secreted

Database links: SwissProt: P02771 Human

Recommended Dilutions:

IHC-P	1:200
WB	1:1,000

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

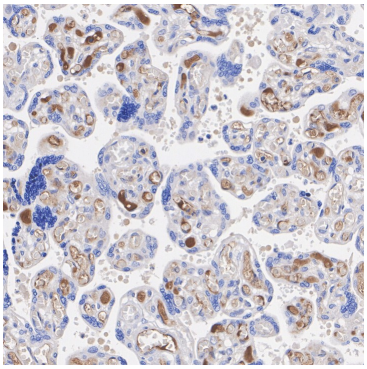

Fig1: Immunohistochemical analysis of paraffin-embedded human placenta tissue with Rabbit anti-AFP antibody (HA721238) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA721238) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

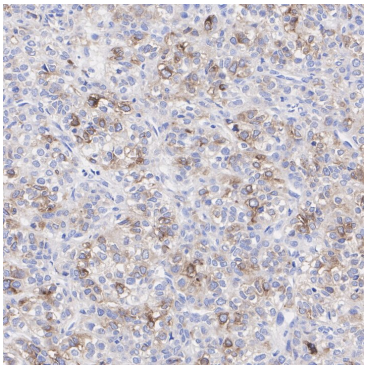

Fig2: Immunohistochemical analysis of paraffin-embedded human poorly differentiated hepatocellular carcinoma tissue with Rabbit anti-AFP antibody (HA721238) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA721238) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

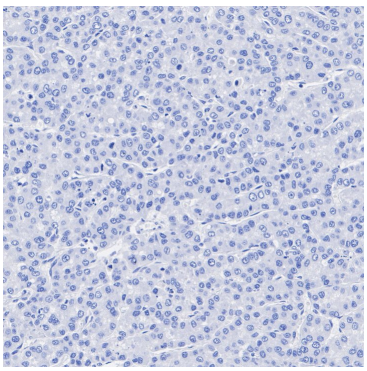

Fig3: Immunohistochemical analysis of paraffin-embedded human well-differentiated hepatocellular carcinoma tissue (negative) with Rabbit anti-AFP antibody (HA721238) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA721238) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

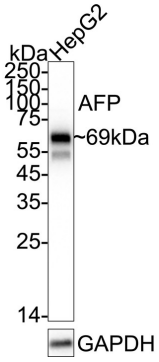

Fig4: Western blot analysis of AFP on HepG2 cell lysates with Rabbit anti-AFP antibody (HA721238) at 1/1,000 dilution.

Lysates/proteins at 20 µg/Lane.

Predicted band size: 69 kDa
Observed band size: 69 kDa

Exposure time: 10 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA721238) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Mizejewski GJ. Alpha-fetoprotein structure and function: relevance to isoforms, epitopes, and conformational variants. Exp Biol Med. 2001; 226: 377-408.
2. Lazarevich NL. Molecular mechanisms of alpha-fetoprotein gene expression. Biochemistry (Mosc). 2000; 65:117-33.