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Certificate of Analysis and Data Sheet

RABBIT ANTI HUMAN ALPHA FETOPROTEIN

With HRP-conjugated secondary antibody

Catalog No.
DS-PB-00112

Species:
Human

Isotype:
Rabbit IgG

Description

α fetoprotein (AFP) is expressed in fetal liver at varying levels throughout development and is present only in trace amounts in normal adult tissues. AFP can be detected at abnormally high concentrations in hepatocellular carcinomas as well as in the plasma and ascitic fluid of adults with hepatoma. High AFP concentrations have been correlated with tumor cell growth, indicating that AFP can serve as a tumor marker. AFP binds copper, nickel and fatty acids, and in some cases may bind serum albumin or estrogen. It has been demonstrated that the AFP promoter is a target for HNF-1 (hepatocyte nuclear factor-1), NF-1 (nuclear factor-1) and C/EBP transcription factors. While HNF-1 binding to the AFP promoter results in AFP expression, NF-1 binding results in a decrease in AFP promoter activity.

Applications

Table Summary of antibody applications and working conditions

Options / Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA			•	
Western Blotting			•	
Immunohistology - frozen	•			1/10-1/40*
Immunohistology - paraffin	•			1/10-1/40*
Immunohistology - resin			•	
Immunoprecipitation			•	
Flow Cytometry			•	
Immunofluorescence staining			•	
Neutralization			•	

Note: Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application.

*This product does not require protein digestion pre-treatment of paraffin sections. This product does not require antigen retrieval using heat treatment prior to staining of paraffin sections.

**The products are furnished for LABORATORY RESEARCH USE ONLY.
Not for diagnostic or therapeutic use.**



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Preparation

Immunogen was recombinant protein derived from human AFP. Antisera to human AFP were raised by repeated immunisation of rabbits with highly purified antigen.

Specificity

DS-PB-00112 recognizes human alpha fetoprotein, and shows positive staining of parenchymal cells of fetal liver and neoplastic liver cells showing yolk sac differentiation in germ cell tumors.

Reconstitution

Supplied as 1ml of purified antibody. It is reconstituted with sterile PBS.

Secondary Antibody Applications

Options / Functions	YES	NO	Not determined	Recommended Work dilution or concentration
Immunoassay (ELISA, Western blot)	•			1:5000-1:10000

Storage

Store at 4⁰C only.

Reference

Aoyagi, Y., Ikenaka, T. and Ichida, F. 1978. Copper (II)-binding ability of human α fetoprotein. Cancer Res. 38: 3483-3486.

Stefanova, I., Horejsi, V., Kristofova, H., Angelisova, P., Zizkovsky, V. and Hilgert, I. 1988. Monoclonal antibodies against human α fetoprotein. Exploitation of an unusual calcium-dependent interaction with the antigen for analytical and preparative purposes. J. Immunol. Methods 111: 67-73.

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