

**Anti Alpha-fetoprotein (human, AFP)  
Mouse Monoclonal Antibody**

 Subclass: IgG<sub>1</sub>

 PRODUCT NO. **HYB 097-04**

 PRESENTATION Preparation: Protein-A/G purified  
 Content: Available in 200 µL and 1 mL, 1 mg/mL  
 Solvent: 0.01 M phosphate buffer, pH 7.4, with 0.5 M NaCl and 15mM sodium azide  
 Storage: In the dark at 4-8°C

ANTIGEN Alpha-fetoprotein (AFP) is a serum protein produced by hepatocytes. AFP levels are used as a tumor marker for hepatomas and germ cell tumors, and the serum concentration has prognostic significance in other diseases. Levels of AFP is 0.6-9.3 kIU/L in blood from normal individuals under the age of 40 (2). Concentrations raise with age and during pregnancy. AFP consists of one single polypeptide chain of 590 aminoacids with MW 65 kDa (3).

IMMUNOGEN Human alpha-fetoprotein isolated from amniotic fluid

SPECIFICITY HYB 097-04 is specific for human AFP. Cross-reactivity to other species or similar molecules have not been investigated.

EPIOTOPE SPECIFICITY Epitope belongs to group II (1) a different group from HYB 097-06, -08 and -09.

REACTIVITY Ka=190, determined as concentration of antibody giving half-maximal binding to hepatoma-AFP bound to solid phase (unit: 108 L/mol). HYB 097-04 reacts strongly with human AFP. Strong reaction is seen when tested in sandwich ELISA in combination with a polyclonal antibody against human AFP (eg. DAKO A0008).

CULTURE MEDIUM RPMI 1640 with 2-10% fetal calf serum

FUSION PARTNER X63-Ag8.653.

 IMMUNIZATION Female CF1 x BALB/c mice immunized i.p. with immunogen adsorbed onto Al(OH)<sub>3</sub>

APPLICATION	Method	Usability	Dilution guideline	References
	ELISA	Yes	1:7500	
	Immunoblotting	Not determined		
	Immunohistochemistry	Not determined		

The dilution guideline for ELISA is based on sandwich ELISA in combination with a polyclonal antibody against the antigen. Users should determine the optimal dilutions for their own purpose.

**REFERENCES**

- Christiansen M, Yazova AK, Karamova ER, Andre'ev AV, Goussev AI, Mortensen V, Pettersson K, Koch C, Norgaard-Pedersen B, Abelev GI (1994) Epitopes of Human Alpha-Fetoprotein. *Int J Tumor Clin Oncol* 9:57-68.
- Christiansen M, Hogdall CK, Andersen JR, Norgaard-Pedersen B (2001) Alpha-fetoprotein in plasma and serum of healthy adults: preanalytical, analytical and biological sources of variation and construction of age-dependent reference intervals. *Scand J Clin Lab Invest* 60:205-215.
- Gitling D (1975) Normal biology of alpha-fetoprotein. *Ann N Y Acad Sci* 259:7-16.
- Norgaard-Pedersen B, Larsen SO, Arends J, Svenstrup B, Tabor A (1990) Maternal serum markers in screening for Down syndrome. *Clin Genet* 37:35-43.

**CONDITIONS**

All products are supplied on the understanding that they are for in vitro use only. The information and product are offered without guarantee as the ultimate conditions of use are beyond our control. The animals from which this product was derived have not been exposed to or inoculated with any livestock or poultry disease agents exotic to the United States or Western Europe, and did not originate from facilities where work with exotic disease agents affecting livestock or avian species is carried out.