

**Anti Alpha-fetoprotein (human, AFP)
Mouse monoclonal antibody**

PRODUCT NO.

HYB 097-09

Subclass: IgG₁/k

Clone: 7C6

PRESENTATION

Preparation: Protein-A/G purified

Content: Available in 200 µL and 1 mL size. 1 mg/mL +/- 15%. See Certificate of Analysis for details.

Solvent: 0.01 M phosphate buffer, pH 7.4, with 0.5 M NaCl and 15mM sodium azide

Storage: 4-8°C without exposure to light. No precautions necessary during handling.

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 adsorbed onto aluminum hydroxide gel

SPECIFICITY

HYB 097-09 is specific for human AFP. Cross-reactivity to other species or similar molecules have not been investigated.

EPI TOPE SPECIFICITY

Epitope belongs to group V (1) different from all other HYB 097 clones

REACTIVITY

Ka=<3.8, determined as concentration of antibody giving half-maximal binding to hepatoma-AFP bound to solid phase (unit: 10⁸ L/mol). Strong reaction is seen when HYB 097-09 is used as a detection antibody in sandwich ELISA in combination with a polyclonal antibody against human AFP (eg. DAKO A0008).

CULTURE MEDIUM

RPMI 1640 with 10% fetal calf serum

FUSION PARTNER

X63-Ag8.653.

IMMUNIZATION

Female CF1 x BALB/c mice immunized by intraperitoneal injection

APPLICATION

Method	Usability	References
ELISA	Yes	2
Immunoblotting	Not determined	
Immunohistochemistry	Not determined	

REFERENCES

- Christiansen M, Yazova AK, Karamova ER, Andre'ev AV, Goussev AI, Mortensen V, Petterson K, Koch C, Norgaard-Pedersen B, Abelev GI (1994) Epitopes of Human Alpha-Fetoprotein. J Tumor Marker 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

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