

11-259-C100

## Monoclonal Antibody to alpha-Fetoprotein Purified Antibody (0.1 mg)

Clone: AFP-01

**Isotype:** Mouse IgG1

Specificity: The antibody AFP-01 reacts with human alpha-Fetoprotein (AFP), a 70 kDa

oncofetal antigen. AFP is a major fetal plasma protein, but is not present in healthy adult tissues. Elevated AFP concentrations in adult plasma may be an early marker of hepatocellular carcinoma or teratoblastoma, while high concentrations in

amniotic fluid may indicate severe congenital defects of a fetus.

Regulatory Status: RUO

**Immunogen:** purified alpha-Fetoprotein

Species Reactivity: Human, Other not tested

**Application:** Immunoprecipitation

Application note: Interaction of the antibody AFP-01 with AFP is dependent on the presence of calcium ions (strongly inhibited by chelating agents). Such characteristics of the antibody can be exploited for immunoaffinity purification of

APF under mild elution conditions.

**ELISA** 

The antibody AFP-01 has been tested as the detection antibody in a sandwich ELISA for analysis of human alpha-Fetoprotein in combination with antibody

AFP-11 (cat. no. 11-384-C100).

Western Blotting

Positive material: Hep G2 human hepatocellular carcinoma cell line

Sample preparation: Resuspend approx. 50 mil. cells in 1 ml cold Lysis buffer (1% laurylmaltoside in 20 mM Tris/Cl, 100 mM NaCl pH 8.2, 50 mM NaF including Protease inhibitor Cocktail). Incubate 60 min on ice. Centrifuge to remove cell debris. Mix lysate with non-reducing/reducing Laemmil SDS-PAGE sample buffer.

Application note: Both non-reducing and reducing conditions.

**Purity:** > 95% (by SDS-PAGE)

**Purification:** Purified by precipitation methods

Concentration: 1 mg/ml

Storage Buffer: Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4

Storage / Stability: Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial

label.

**Expiration:** See vial label

Lot Number: See vial label



## PRODUCT DATA SHEET

## References:

\*Stefanova I, Horejsi V, Kristofova H, Angelisova P, Zizkovsky V, Hilgert I: Monoclonal antibodies against human alpha-fetoprotein. Exploitation of an unusual calcium-dependent interaction with the antigen for analytical and preparative purposes. J Immunol Methods. 1988 Jun 28;111(1):67-73.

\*Cavin LG, Venkatraman M, Factor VM, Kaur S, Schroeder I, Mercurio F, Beg AA, Thorgeirsson SS, Arsura M: Regulation of alpha-fetoprotein by nuclear factor-kappaB protects hepatocytes from tumor necrosis factor-alpha cytotoxicity during fetal liver development and hepatic oncogenesis. Cancer Res. 2004 Oct 1:64(19):7030-8.

\*Cermák L, Símová S, Pintzas A, Horejsí V, Andera L: Molecular mechanisms involved in CD43-mediated apoptosis of TF-1 cells. Roles of transcription Daxx expression, and adhesion molecules. J Biol Chem. 2002 Mar 8;277(10):7955-61.

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