

Monoclonal Antibody to Alpha-fetoprotein (AFP) - Purified

Alternate names:	Alpha-1-fetoprotein, Alpha-fetoglobulin, HPAFP
Catalog No.:	SM3089P
Quantity:	0.1 mg
Concentration:	1.0 mg/ml
Background:	AFP is an 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.
Uniprot ID:	P02771
NCBI:	NP_001125.1
GeneID:	174
Host / Isotype:	Mouse / IgG1
Clone:	AFP-01
Immunogen:	Purified alpha-Fetoprotein
Format:	State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE) Purification: Precipitation Methods Buffer System: Phosphate buffered saline (PBS), pH~7.4 with 15 mM Sodium Azide as preservative
Applications:	Immunoprecipitation: Interaction of the antibody 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 has been tested as the detection antibody in a Sandwich ELISA for analysis of human alpha-Fetoprotein in combination with clone AFP-11 (cat. no. SM3090P). Western blot (Both non-reducing and reducing conditions) <i>Positive Material:</i> Hep G2 human hepatocellular carcinoma cell line. <i>Sample Preparation:</i> 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 Laemmli SDS-PAGE sample buffer. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	The antibody reacts with 70 kDa alpha-Fetoprotein (AFP).
Species Reactivity:	Tested: Human.

For research and in vitro use only. Not for diagnostic or therapeutic work.

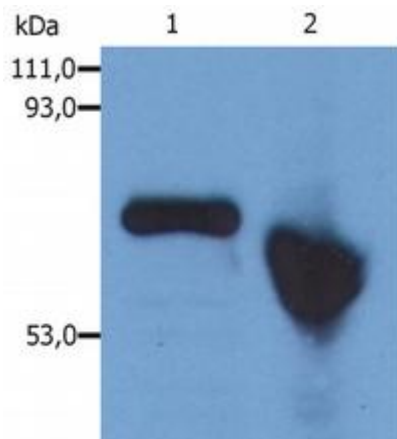
Material Safety Datasheets are available at www.acris-antibodies.com or on request.

Antibody Hotline - Technical Questions - Antibody Location Service
Free Call: 0800-2274746 (Germany only) - www.acris-antibodies.com

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General References: 1. 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.
2. 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.
3. Cermak L, Simova S, Pintzas A, Horejsi 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.
4. Cermak L, Simova S, Pintzas A, Horejsi 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.

Pictures:



Western Blotting analysis of Human alpha-Fetoprotein in HepG2 Human hepatocellular carcinoma cell line.
Lane 1: Immunostaining with anti-Human alpha-Fetoprotein antibody (AFP-01), Reducing Conditions.
Lane 2: Immunostaining with anti-Human alpha-Fetoprotein antibody (AFP-01), Non-Reducing Conditions.

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