

## Product datasheet

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# ARG62669 anti-alpha Fetoprotein antibody [AFP-01]

Package: 100 μg Store at: -20°C

#### **Summary**

Product Description Mouse Monoclonal antibody [AFP-01] recognizes alpha-Fetoprotein

Tested Reactivity Hu

Tested Application ELISA, ICC/IF, IP, WB

Specificity The clone 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.

Host Mouse

Clonality Monoclonal

Clone AFP-01

Isotype IgG1

Target Name alpha Fetoprotein

Immunogen purified alpha-Fetoprotein

Conjugation Un-conjugated

Alternate Names Alpha-fetoprotein; HPAFP; FETA; Alpha-fetoglobulin; AFPD; Alpha-1-fetoprotein

#### **Application Instructions**

Application table	Application	Dilution
	ELISA	Assay-dependent
	ICC/IF	Assay-dependent
	IP	Assay-dependent
	WB	Assay-dependent
	IP: 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.  WB: 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 Laemmli SDS-PAGE sample buffer.  * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	WB: HepG2	

#### **Properties**

Form Liquid

Purification Purified from ascites by precipitation methods.

Purity > 95% (by SDS-PAGE)

Buffer PBS (pH 7.4) and 15 mM Sodium azide

Preservative 15 mM Sodium azide

Concentration 1 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Database links <u>GeneID: 174 Human</u>

Swiss-port # P02771 Human

Gene Symbol AFP

Gene Full Name alpha-fetoprotein

Background This gene encodes alpha-fetoprotein, a major plasma protein produced by the yolk sac and the liver

during fetal life. Alpha-fetoprotein expression in adults is often associated with hepatoma or teratoma. However, hereditary persistance of alpha-fetoprotein may also be found in individuals with no obvious pathology. The protein is thought to be the fetal counterpart of serum albumin, and the alpha-fetoprotein and albumin genes are present in tandem in the same transcriptional orientation on chromosome 4. Alpha-fetoprotein is found in monomeric as well as dimeric and trimeric forms, and binds copper, nickel, fatty acids and bilirubin. The level of alpha-fetoprotein in amniotic fluid is used to measure renal loss of protein to screen for spina bifida and anencephaly. [provided by RefSeq, Jul 2008]

Function Binds copper, nickel, and fatty acids as well as, and bilirubin less well than, serum albumin. Only a small

percentage (less than 2%) of the human AFP shows estrogen-binding properties. [UniProt]

Highlight Related products:

alpha Fetoprotein antibodies; alpha Fetoprotein ELISA Kits; alpha Fetoprotein Duos / Panels;

Anti-Mouse IgG secondary antibodies;

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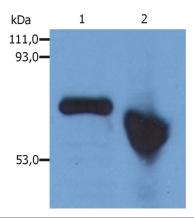
Research Area Cancer antibody; Cell Biology and Cellular Response antibody; Developmental Biology antibody

Calculated Mw 69 kDa

PTM Independent studies suggest heterogeneity of the N-terminal sequence of the mature protein and of

the cleavage site of the signal sequence.

Sulfated.



### ARG62669 anti-alpha Fetoprotein antibody [AFP-01] WB image

Western blot: Hep G2 cell lysate stained with ARG62669 anti-alpha Fetoprotein antibody [AFP-01].

Lane 1: immunostaining with anti-human alpha-Fetoprotein under reducing conditions. Lane 2: immunostaining with anti-human alpha-Fetoprotein under non-reducing conditions.