

Anti-alpha 1 Fetoprotein antibody [AFP-01] ab3980

★★★★★ [3 Abreviews](#) [39 References](#) [1 Image](#)

Overview

Product name	Anti-alpha 1 Fetoprotein antibody [AFP-01]
Description	Mouse monoclonal [AFP-01] to alpha 1 Fetoprotein
Host species	Mouse
Specificity	The antibody reacts with human alpha-Fetoprotein (AFP), an oncofetal antigen of 70 kDa. 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.
Tested applications	Suitable for: ICC/IF
Species reactivity	Reacts with: Human
Immunogen	Full length native protein (purified) corresponding to Human alpha 1 Fetoprotein.
Positive control	ICC/IF: MCF7 cells
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.097% Sodium azide Constituent: PBS
Purity	Proprietary Purification
Purification notes	Purified by precipitation and chromatography
Clonality	Monoclonal

Clone number	AFP-01
Myeloma	unknown
Isotype	IgG1
Light chain type	unknown

Applications

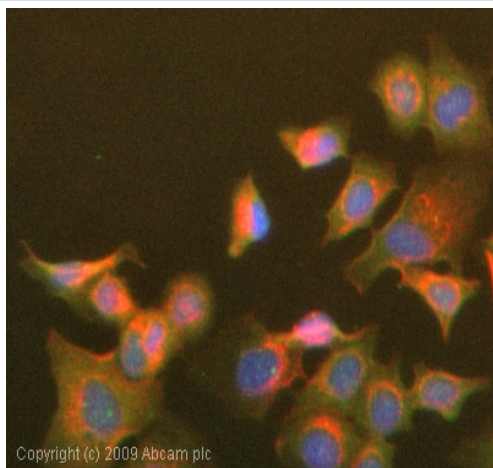
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab3980 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF	★★★★★ (2)	Use a concentration of 5 µg/ml.

Target

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.
Tissue specificity	Plasma. Synthesized by the fetal liver and yolk sac.
Sequence similarities	Belongs to the ALB/AFP/VDB family. Contains 3 albumin domains.
Developmental stage	Occurs in the plasma of fetuses more than 4 weeks old, reaches the highest levels during the 12th-16th week of gestation, and drops to trace amounts after birth. The serum level in adults is usually less than 40 ng/ml. AFP occurs also at high levels in the plasma and ascitic fluid of adults with hepatoma.
Post-translational modifications	Independent studies suggest heterogeneity of the N-terminal sequence of the mature protein and of the cleavage site of the signal sequence. Sulfated.
Cellular localization	Secreted.

Images



Immunocytochemistry/ Immunofluorescence - Anti-alpha 1 Fetoprotein antibody [AFP-01] (ab3980)

ICC/IF image of ab3980 stained MCF7 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab3980, 5µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-mouse IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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