

AFP Monoclonal Antibody (P5B8)

Product Details	
Size	100 µg
Species Reactivity	Human
Published Species	Human
Host/Isotype	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	P5B8
Conjugate	Unconjugated
Immunogen	Purified AFP from Cord Blood
Form	Liquid
Concentration	1 mg/mL
Purification	Protein A
Storage buffer	0.01M potassium phosphate with 0.135M NaCl, 2.5mM KCl, 1mg/mL BSA
Contains	0.05% sodium azide
Storage conditions	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C
RRID	AB_10987005

Applications	Tested Dilution	Publications
Western Blot (WB)	1:1,000	-
Immunohistochemistry (IHC)	-	1 Publication
Immunocytochemistry (ICC/IF)	5 µg/mL	-
ELISA (ELISA)	Assay-dependent	-
Immunoprecipitation (IP)	Assay-dependent	-
Radioimmune Assays (RIA)	Assay-dependent	1 Publication

Product Specific Information

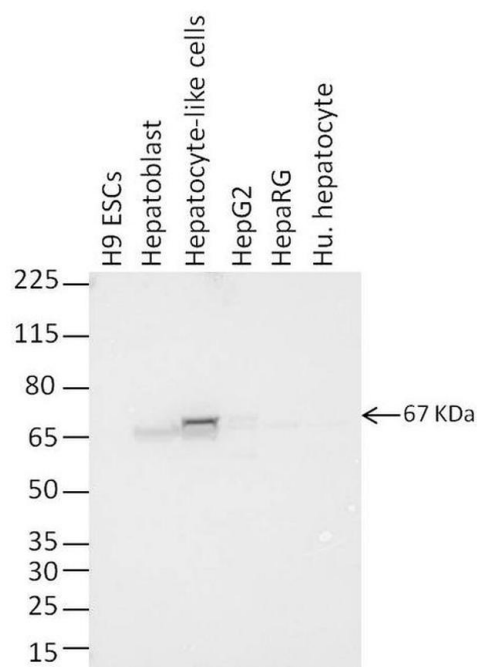
MA5-14666 can be used for immunofluorescence analysis of AFP in the endoderm derived from human embryonic stem cells. By Western blot, MA5-14666 detects endogenous AFP protein in the early hepatocyte-like cells derived from human embryonic stem cells.

Product MA514666 is a smaller package size of MIA1305 (formerly sold as a Seradyn product).

Product Images For AFP Monoclonal Antibody (P5B8)

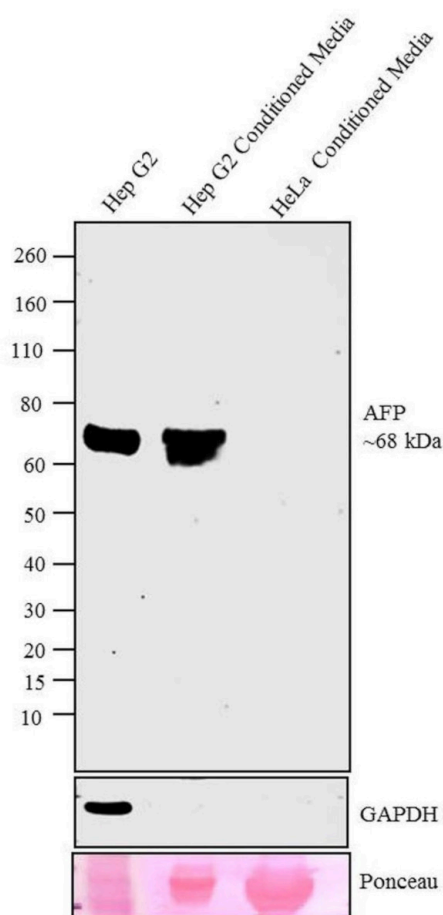
AFP Antibody (MA5-14666) in WB

Western blot analysis of alpha-fetoprotein was performed by loading 10 µg of whole cell extract from H9 ESCs, H9 ESC-derived hepatoblasts, ESC-derived hepatocyte-like cells, HepG2 cells, HepaRG cells, and primary human hepatocytes in reducing conditions and 10 µL Spectra Multicolor Broad Range Protein Ladder (Product # 26634) per well onto a Novex Bolt® 4-12% Bis-Tris Plus Gel with Bolt® MOPS running buffer and Bolt® Antioxidant. Proteins were transferred to a PVDF membrane using the iBlot 2 Dry Blotting System (Product # IB21001), and blocked with 5% non-fat milk in TBST for 1 hour at room temperature. alpha-Fetoprotein was detected at 67 kDa using an alpha-fetoprotein monoclonal antibody (Product # MA5-14666) at a concentration of 1 µg/mL in 5% non-fat milk in TBST overnight at 4°C on a rocking platform, followed by a goat anti-mouse secondary antibody (Product # A24518) at a dilution of 1:10,000 for 1 hour at room temperature. Chemiluminescent detection was performed using Pierce™ ECL Western Blotting Substrate (Product # 32106).

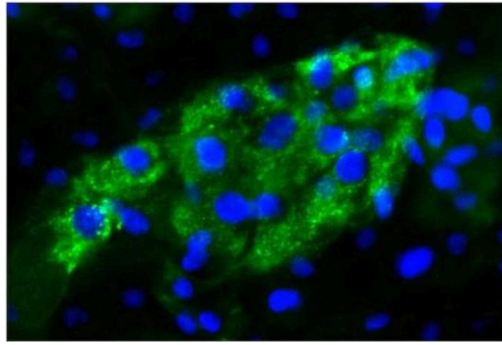


AFP Antibody (MA5-14666)

Antibody specificity was demonstrated by detection of differential basal expression of the target across cell models owing to their inherent genetic constitution. Expression of AFP was observed in HepG2 Conditioned Media compared to HeLa Conditioned Media using AFP Mouse Monoclonal Antibody (Product # MA5-14666) in Western Blot. {RE}



AFP Antibody (MA5-14666) in ICC/IF



Immunofluorescent analysis of alpha-fetoprotein (green) in the endoderm derived from human ES cells. Embryoid bodies (EBs) were generated from the H9 embryonic stem cell line (WiCell Research Institute, WA09) using Gibco® KnockOut™ Serum Replacement. After four days in suspension culture, EBs were plated on Geltrex™-coated tissue culture-treated polystyrene plates and continuously cultured for 21 days. EB cultures were then fixed and permeabilized according to the 3-Germ Layer Immunocytochemistry Kit (Product # A25538) and blocked with 3% BSA for 30 minutes at room temperature. Cells were stained with anti-alpha-fetoprotein (Product # MA5-14666, 1:200 dilution, 5 µg/mL final concentration) at 4°C overnight, and then incubated with a Goat anti-Mouse IgG (H+L) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A28175) at a dilution of 1:1000 for at least 30 minutes at a room temperature in the dark (green). Nuclei (blue) were stained with Hoechst 33342 (Product # 62249). Stained cells were imaged at 40X using the EVOS® FL Auto Imaging System.

[View more figures on thermofisher.com](#)

2 References

Immunohistochemistry (1)

Stem cell research & therapy

Implanted subcutaneous versus intraperitoneal bioscaffold seeded with hepatocyte-like cells: functional evaluation.

"MA5-14666 was used in Radioactive-immunoassays to generate bioscaffold from decellularized liver and subsequently seed it with trans-differentiated human stem cells into hepatic-like cells. This scaffold can then be implanted intraperitoneally or subcutaneously to provide FVIII."

Authors: Fares AE,Gabr H,ShamsEldeen AM,Farghali HAM,Rizk MMSM,Mahmoud BE,Tammam ABA,Mahmoud AMA,Suliman AAM,Ayyad MAA,Ahmed SH,Hassan RM

Year
2021

Species
Human

Radioimmune Assays (1)

Stem cell research & therapy

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Year
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Species
Human

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