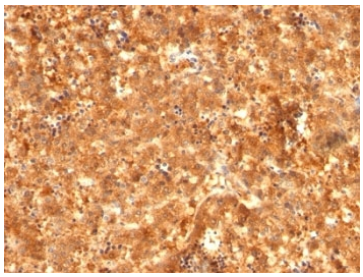
AFP Antibody / Alpha Fetoprotein Tumor Marker Antibody [clone C2 + C3 + MBS-12] (V2476)

Catalog No.	Formulation	Size
V2476-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2476-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2476SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	C2 + C3 + MBS-12
Purity	Protein G affinity chromatography
UniProt	P02771
Localization	Cytoplasmic
Applications	Immunofluorescence : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT Western Blot : 2-4ug/ml
Limitations	This AFP Antibody / Alpha Fetoprotein Tumor Marker Antibody is available for research use only.



AFP Antibody HepG2 Cell IF. Immunofluorescence analysis of PFA-fixed human HepG2 cells using AFP Antibody (clones C2 + C3 + MBS-12, green) shows cytoplasmic and perinuclear staining consistent with Alpha fetoprotein localization within the secretory pathway of hepatocyte-derived cells. Redot nuclear counterstain (red) provides contrast to cell nuclei. The punctate cytoplasmic distribution supports detection of AFP as a secreted tumor marker protein in liver cancer cell models.

Description

Alpha fetoprotein (AFP) is a secreted glycoprotein encoded by the AFP gene and is widely recognized as a clinically important tumor marker associated with liver cancer and germ cell tumors. AFP Antibody / Alpha Fetoprotein Tumor Marker Antibody is designed to detect AFP in biological systems where tumor identification and differentiation are of interest. AFP is highly expressed during fetal development, particularly in the liver and yolk sac, and is normally present at low levels in healthy adult tissues.

The AFP antibody, also referred to as Alpha fetoprotein antibody in the literature, recognizes a protein that is primarily localized in the cytoplasm and secretory pathways of AFP-producing cells. In adult pathology, AFP expression is most commonly associated with hepatocellular carcinoma and certain germ cell tumors, where reactivation of fetal gene expression programs leads to elevated AFP production. As a result, AFP serves as a key biomarker for tumor detection, classification, and monitoring.

This AFP Antibody / Alpha Fetoprotein Tumor Marker Antibody is uniquely positioned for studies of tumor biology and cancer-associated protein expression. The use of a mouse monoclonal antibody cocktail consisting of clones C2, C3, and MBS-12 enhances detection sensitivity and epitope coverage, improving the ability to identify AFP across different sample types and expression contexts. In immunohistochemistry, AFP is typically observed as cytoplasmic staining in tumor cells, reflecting its synthesis and secretion. In immunofluorescence and western blot analysis, AFP can be detected in cellular and extracellular compartments depending on the experimental system.

AFP plays an important role during embryonic development as a transport protein and regulator of growth, but its re-expression in adult tissues is strongly associated with malignancy. In hepatocellular carcinoma, AFP expression is frequently elevated and correlates with tumor burden and disease progression. In germ cell tumors, particularly yolk sac tumors, AFP serves as a defining diagnostic marker. Detection of AFP expression is therefore widely used in both research and clinical contexts to support tumor identification and characterization.

The AFP Antibody cocktail (clones C2 + C3 + MBS-12) provides robust and reliable detection of AFP across multiple assay formats, supported by its multi-epitope recognition strategy. This AFP Antibody / Alpha Fetoprotein Tumor Marker Antibody is suitable for detecting AFP expression in studies of cancer biology, tumor marker analysis, and developmental protein re-expression. Its performance supports detailed evaluation of AFP localization and expression across normal and pathological tissues.

This antibody supports investigation of tumor marker expression, cancer biology, and disease-associated reactivation of fetal protein pathways involving AFP.

This antibody is part of a broader antibody panel offered by NSJ Bioreagents.

Application Notes

Optimal dilution of the AFP Antibody / Alpha Fetoprotein Tumor Marker Antibody should be determined by the researcher.

1. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 min
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Recombinant full-length human Alpha Fetoprotein was used as the immunogen for the AFP antibody cocktail.

Storage

Store the AFP antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

AFP antibody, Alpha fetoprotein antibody, Alpha-fetoprotein antibody, AFP tumor marker antibody, AFP cocktail antibody