**AFP (AFP-11): sc-51506**

**BACKGROUND**

α-fetoprotein (AFP) is expressed in fetal liver at varying levels throughout development and is present only in trace amounts in normal adult tissues. AFP can be detected at abnormally high concentrations in hepatocellular carcinomas as well as in the plasma and ascitic fluid of adults with hepatoma. High AFP concentrations have been correlated with tumor cell growth, indicating that AFP can serve as a tumor marker. AFP binds copper, nickel and fatty acids, and in some cases may bind serum albumin or estrogen. It has been demonstrated that the AFP promoter is a target for NF-1 (nuclear factor-1), HNF-1 (hepatocyte nuclear factor-1) and C/EBP transcription factors. While HNF-1 binding to the AFP promoter results in AFP expression, NF-1 binding results in a decrease in AFP promoter activity.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: AFP (human) mapping to 4q13.3.

**SOURCE**

AFP (AFP-11) is a mouse monoclonal antibody raised against purified AFP of human origin.

**PRODUCT**

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

AFP (AFP-11) is recommended for detection of AFP of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg of total protein [1 ml of cell lysate]), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for AFP siRNA (h2): sc-270319, AFP shRNA Plasmid (h2): sc-270319-SH and AFP shRNA (h2) Lentiviral Particles: sc-270319-V.

Molecular Weight of AFP: 68 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, HeLa whole cell lysate: sc-2200 or HUV-EC-C cell lysate: sc-364180.

**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**DATA**

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>92 K</td>
<td>B -- AFP</td>
</tr>
<tr>
<td>65 K</td>
<td></td>
</tr>
<tr>
<td>48 K</td>
<td></td>
</tr>
</tbody>
</table>

 AFP (AFP-11): sc-51506. Western blot analysis of human recombinant AFP under non-reducing (A) and reducing (B) conditions.

 AFP (AFP-11): sc-51506. Western blot analysis of AFP expression in Hep G2 whole cell lysate.

**SELECT PRODUCT CITATIONS**


See **AFP (C3): sc-8399** for AFP antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.