

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human α -Fetoprotein in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 189506
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Human umbilical cord serum-derived α -Fetoprotein
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μ m filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Immunocytochemistry	8-25 μ g/mL	Immersion fixed HepG2 human hepatocellular carcinoma cell line
Intracellular Staining by Flow Cytometry	2.5 μ g/10 ⁶ cells	HepG2 human hepatocellular carcinoma cell line fixed with paraformaldehyde and permeabilized with saponin

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

AFP (α -Fetoprotein) is a 69-73 kDa member of the ALB/AFP/VDB family of proteins. α -Fetoprotein is a major plasma protein in the fetus. Its concentration is normally low in the adult except when produced by certain tumors. It is secreted by fetal liver and serves as a carrier molecule for phytoestrogens, heavy metals (Cu and Ni), estrogen and fatty acids. Mature human AFP is 591 amino acids (aa) in length. It contains three albumin domains (aa 19-210, 211-402 and 403-601), plus 15 intrachain disulfide bonds. Mature human AFP shares approximately 66% aa identity with mouse AFP.

References:

1. Matsumura, M. *et al.* (2001) *Hepatology*. **20**:84
2. Deutsch, H.F. *et al.* (2000) *Tumor Biol.* **21**:267