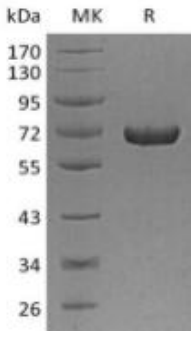


Recombinant Human AFP

Catalog#:AC81119 Derived from Human Cells

DESCRIPTION	<p>Recombinant Human Alpha-fetoprotein is produced by our Mammalian expression system and the target gene encoding Arg19-Val609 is expressed with a 6His tag at the C-terminus.</p> <p>Accession#: P02771</p> <p>Known as: Alpha-fetoprotein; Alpha- 1-fetoprotein; Alpha-fetoglobulin; AFP; HPAFP</p>
FORMULATION	Lyophilized from a 0.2 μ m filtered solution of PBS, pH 7.4.
SHIPPING	<p>The product is shipped at ambient temperature.</p> <p>Upon receipt, store it immediately at the temperature listed below.</p>
STORAGE	<p>Lyophilized protein should be stored at $<-20^{\circ}\text{C}$, though stable at room temperature for 3 weeks.</p> <p>Reconstituted protein solution can be stored at $4-7^{\circ}\text{C}$ for 2-7 days.</p> <p>Aliquots of reconstituted samples are stable at $<-20^{\circ}\text{C}$ for 3 months.</p>
RECONSTITUTION	<p><i>Always centrifuge tubes before opening. Do not mix by vortex or pipetting.</i></p> <p><i>It is not recommended to reconstitute to a concentration less than 100$\mu\text{g/ml}$.</i></p> <p>Dissolve the lyophilized protein in distilled water.</p> <p>Please aliquot the reconstituted solution to minimize freeze-thaw cycles.</p>
QUALITY CONTROL	<p>Mol Mass:67.3kDa AP Mol Mass:65-70kDa, reducing conditions.</p> <p>Purity: Greater than 95% as determined by reducing SDS-PAGE.</p> <p>Endotoxin: Less than 0.1 ng/μg (1 EU/μg) as determined by LAL test.</p>
BACKGROUND	<p>Alpha-fetoprotein (AFP) is classified as a member of the albuminoid gene superfamily consisting of albumin, AFP, vitaminD (Gc) protein, and alpha-albumin. AFP is a glycoprotein of 591 amino acids and a carbohydrate moiety. AFP is a major plasma protein produced by the yolk sac and the liver during fetal development. It is thought to be the fetal form of serum albumin. AFP binds to copper, nickel, fatty acids and bilirubin and is found in monomeric, dimeric and trimeric forms. AFP is one of the several embryo- specific proteins and is adominant serum protein as early in human embryonic life as one month, when albumin and transferrin are present in relatively small amounts. It is first synthesized in the human by the yolk sac and liver (1-2months) and subsequently predominantly in the liver. A small amount of AFP is produced by the GI tract of the human conceptus. It has been proved that AFP may reappear in the serum in elevated amounts in adult life in association with normal restorative processes and with malignnt growth. Alpha-fetoprotein (AFP) is a specific marker for hepatocellular carcinoma (HCC), teratoblastomas, and neural tube defect (NTD).</p>
<p>SDS-PAGE</p>  <p>The SDS-PAGE gel shows a single prominent band in lane R at approximately 72 kDa, corresponding to the expected molecular weight of recombinant human AFP. Lane MK (molecular weight markers) shows bands at 170, 130, 95, 72, 55, 43, 34, and 26 kDa.</p>	