

Synonym

Alpha-fetoprotein

Source

Human Alpha-fetoprotein, His Tag(ALN-H52H9) is expressed from human 293 cells (HEK293). It contains AA Arg 19 - Val 609 (Accession # [P02771-1](#)).

Predicted N-terminus: Arg 19

Molecular Characterization

Alpha-fetoprotein(Arg 19 - Val 609)
P02771-1 Poly-his

This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 68.2 kDa. The protein migrates as 70-75 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

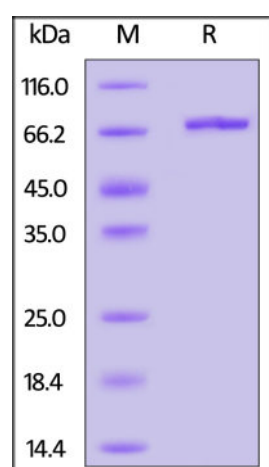
Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

Human Alpha-fetoprotein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Background

Alpha-fetoprotein(AFP) is the first tumor marker with clinical application value found by human. AFP has an ability to induce the immune escapes through inhibiting the function of dendritic cells, natural killer cells, and T lymphocytes. By in vitro modification, the immunogenicity and immune response of AFP could be enhanced. AFP-modified immune cell vaccine or peptide vaccine has displayed the specific antitumor immunity against AFP-positive tumor cells and laid a better foundation for the immunotherapy of liver cancer. Alpha-fetoprotein is found in monomeric as well as dimeric and trimeric forms, and binds copper, nickel, fatty acids and bilirubin. The level of alpha-fetoprotein in amniotic fluid is used to measure renal loss of protein to screen for spina bifida and anencephaly.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.