

## HUMAN AFP PROTEIN, HFC TAG

**Cat.#:** 11198

**Product Name:** Human AFP Protein

**Size :** 10 µg, 50 µg and 100 µg

**Synonyms:** AFPD;FETA;HPAFP

**Target:** AFP

**UNIPROT ID:** P02771

**Description:** Recombinant human AFP protein with C-terminal human Fc tag

**Background:** This gene encodes alpha-fetoprotein, a major plasma protein produced by the yolk sac and the liver during fetal life. Alpha-fetoprotein expression in adults is often associated with hepatocarcinoma and with teratoma, and has prognostic value for managing advanced gastric cancer. However, hereditary persistence of alpha-fetoprotein may also be found in individuals with no obvious pathology. The protein is thought to be the fetal counterpart of serum albumin, and the alpha-fetoprotein and albumin genes are present in tandem in the same transcriptional orientation on chromosome 4. 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.

**Species/Host:** HEK293

**Molecular Weight:** The protein has a predicted molecular mass of 92.6 kDa after removal of the signal peptide. The apparent molecular mass of AFP-hFc is approximately 100-130 kDa due to glycosylation.

**Molecular Characterization:** AFP(Arg19-Val609) hFc(Glu99-Ala330)

**Purity:** The purity of the protein is greater than 90% as determined by SDS-PAGE and Coomassie blue staining.

**Formulation & Reconstitution:** Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

**Storage & Shipping:** Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.



Figure 1. Human AFP Protein, hFc Tag on SDS-PAGE under reducing condition.

### Human AFP,hFc Tagged protein ELISA

0.2 µg of Human AFP, hFc tagged protein per well

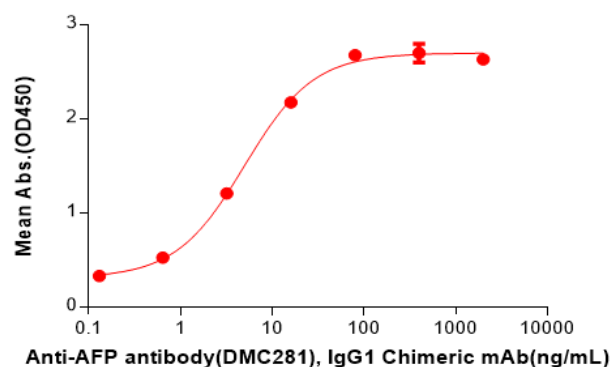


Figure 2. ELISA plate pre-coated by 2 µg/ml (100 µl/well) Human AFP Protein, hFc Tag(11198) can bind Anti-AFP antibody(DMC281), IgG1 Chimeric mAb in a linear range of 0.64-16 ng/mL.