

## PRODUCT INFORMATION

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| <b>Target</b>                           | AFP  |
| <b>Synonyms</b>                         | AFPD;FETA;HPAFP  |
| <b>Description</b>                      | Recombinant human AFP protein with C-terminal human Fc tag   |
| <b>Delivery</b>                         | In Stock   |
| <b>Uniprot ID</b>                       | P02771   |
| <b>Expression Host</b>                  | HEK293   |
| <b>Tag</b>                              | C-Human Fc Tag   |
| <b>Molecular Characterization</b>       | AFP(Arg19-Val609) hFc(Glu99-Ala330)  |
| <b>Molecular Weight</b>                 | 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.  |
| <b>Purity</b>                           | The purity of the protein is greater than 90% as determined by SDS-PAGE and Coomassie blue staining.   |
| <b>Formulation &amp; Reconstitution</b> | Lyophilized from sterile PBS, pH 7.4. Normally 5% - 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions of reconstitution.  |
| <b>Storage &amp; Shipping</b>           | 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.  |
| <b>Background</b>                       | 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. |
| <b>Usage</b>                            | Research use only  |
| <b>Conjugate</b>                        | Unconjugated   |



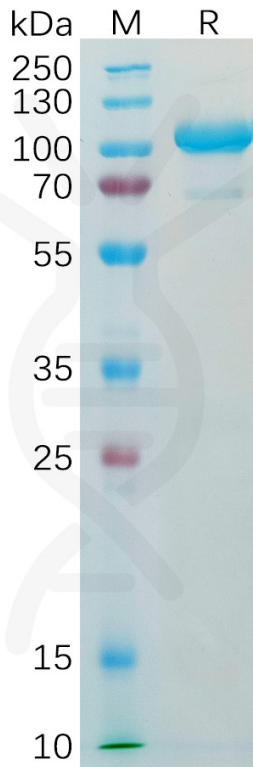


Figure 1. Human AFP Protein, hFc Tag on SDS-PAGE under reducing condition.

### Human AFP,hFc Tagged protein ELISA

0.2 µg of Human AFP, hFc tagged protein per well

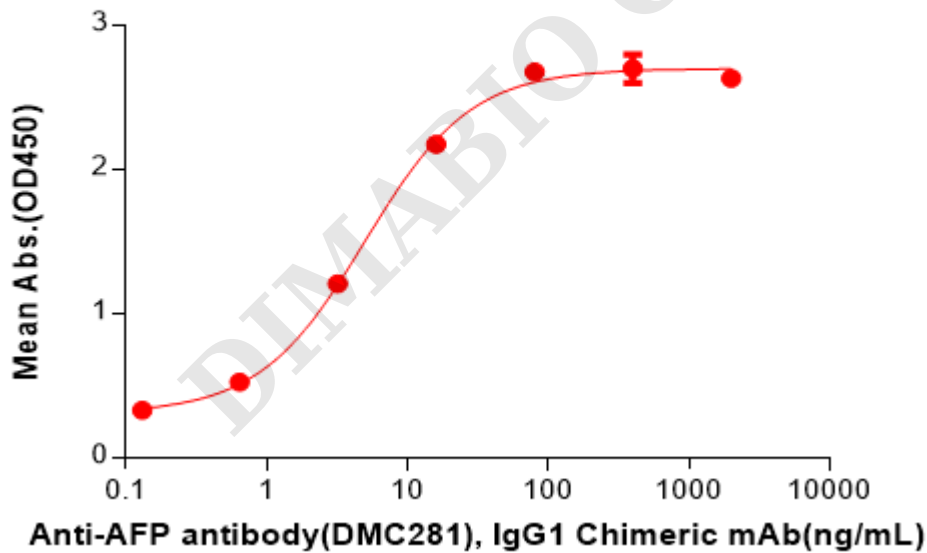


Figure 2. ELISA plate pre-coated by 2 µg/mL (100 µL/well) Human AFP Protein, hFc Tag(PME100075) can bind Anti-AFP antibody(DMC281), IgG1 Chimeric mAb in a linear range of 0.64-16 ng/mL.

