

Technical Data Sheet

Human IgG1-Fc with multiple tags

Catalog Number: 600401, 600402

Size: 25 ug, 100 ug

Target Name: Human IgG1-Fc with multiple tags (hIgG1-Fc-Myc-Avi-V5-DYKDDDDK-HA-His)

Regulatory Status: RUO

Product Details

Application: ELISA

Format: Liquid, Purified

Expression Host: HEK293

Species: Human

Accession Number: P01857

Sources: Human IgG1-Fc (Thr106-Lys330) protein with multiple tags (Myc-Avi-V5-FLAG-HA-His) at C-terminus is expressed in HEK293 cells.

Molecular Weight: This protein has a predicted molecular weight of 35.8 kDa. Under DTT-reducing conditions, the protein migrates at approximately 40 kDa on SDS-PAGE. The smaller band below 30 kDa might correspond to the early translational termination product.

Affinity Tag: C-Myc-Avi-V5-DYKDDDDK-HA-His

Purity: >85% based on SDS-PAGE under reducing condition

Formulation: 1xPBS with 0.09% NaN₃ buffer, pH7.4, 0.22 µm filtered

Endotoxin level: Not tested

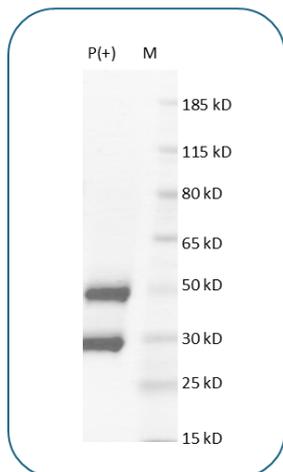
Protein Concentration: 25µg size is bottled at 0.2mg/mL concentration. 100 µg size is supplied at a lot-specific concentration.

Storage and Handling: Briefly centrifuge the vial upon receipt. An unopened vial can be stored at 4°C for up to 2 weeks, or at -20°C or below for up to six months. The protein may be further diluted to 0.1 mg/mL using 0.22 µm-filtered PBS buffer (pH 7.4). For long-term storage, the diluted stock solution should be aliquoted and stored at ≤ -70°C to minimize freeze-thaw cycles. If additional dilution is required, carrier proteins such as FBS or BSA should be added to maintain protein stability.

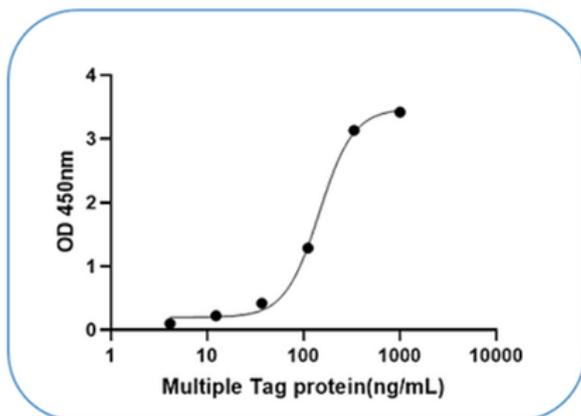
Background Information

Fc fragments consist of the carboxy-terminal halves of both immunoglobulin heavy chains connected by disulfide bonds, forming the constant region responsible for antibody effector functions. These functions include complement fixation, binding to Fc receptors on immune cells (such as CD16, CD32, and CD64), and mediating placental transport of antibodies. The Fc region plays a critical role in immune defense by triggering processes like opsonization, antibody-dependent cellular cytotoxicity (ADCC), and inflammation. Additionally, proteins like Protein A and Protein G, found on certain bacteria, specifically bind to the Fc region and are widely used in biotechnology for antibody purification. Recombinant Fc fragments also have potential therapeutic applications as anti-inflammatory agents in autoimmune diseases.

Product Data



Human IgG1-Fc multi-tag protein final product on SDS-PAGE under reducing (P+) conditions. The purity of this protein appears to be greater than 85%. Smaller band below 30 kD might correspond to the early translational termination product.



Anti-FLAG (clone BR20M05) antibody is coated at 1 ug/mL (100ng/well). Anti-FLAG antibody can capture the multi-tag protein. HRP anti-His tag antibody (clone BR20M03) is used as the detection reagent. In the sandwich ELISA assay.