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## Product Datasheet

### Recombinant Human IgG4 Fc (224AA) EBT-EPT285

Article Name	Recombinant Human IgG4 Fc (224AA)
Biozol Catalog Number	EBT-EPT285
Supplier Catalog Number	EPT285
Alternative Catalog Number	EBT-EPT285-50
Manufacturer	ELK Biotechnology
Category	Proteine/Peptide
Product Description	Recombinant Human Ig Gamma-4 Chain C Region is produced by our Mammalian expression system and the target gene encoding Pro104-Lys327(Leu325Pro) is expressed....
Molecular Weight	Molecular weight: 25.1 KDa. Apparent molecular weight: 30 KDa, reducing conditions
UniProt	<a href="#">P01861</a>
Purity	Greater than 95% as determined by reducing SDS-PAGE.

Application Notes

Redissolve: Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.. Endotoxin: Less than 0.1 ng/µg (1 EU/µg) as determined by LAL test. Background: As a monomeric immunoglobulin that is predominately involved in the secondary antibody response and the only isotype that can pass through the human placenta, Immunoglobulin G (IgG) is synthesized and secreted by plasma B cells, and constitutes 75% of serum immunoglobulins in humans. IgG antibodies protect the body against the pathogens by agglutination and immobilization, complement activation, toxin neutralization, as well as the antibody-dependent cell-mediated cytotoxicity (ADCC). IgG tetramer contains two heavy chains (50 kDa ) and two light chains (25 kDa) linked by disulfide bonds, that is the two identical halves form the Y-like shape. IgG is digested by pepsin proteolysis into Fab fragment (antigen-binding fragment) and Fc fragment (crystallizable fragment). IgG1 is most abundant in serum among the four IgG subclasses (IgG1, 2, 3 and 4) and binds to Fc receptors (FcγR ) on phagocytic cells with high affinity. Fc fragment is demonstrated to mediate phagocytosis, trigger inflammation, and target Ig to particular tissues. Protein G or Protein A on the surface of certain Staphylococcal and Streptococcal strains specifically binds with the Fc region of IgGs, and has numerous applications in biotechnology as a reagent for affinity purification. Recombinant IgG Fc Region is suggested to represent a potential anti-inflammatory drug for treatment of human autoimmune diseases