

RP00804

Leader in Biomolecular Solutions for Life Science



Recombinant Human IgG4 Fc Protein

Catalog No.: RP00804

Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
Human		P01861

Tags

No tag

Synonyms

Ig gamma-4 chain C region;IgG4 Fc

Product Information

Source	Purification
HEK293 cells	> 95% by SDS-PAGE.

Endotoxin

< 1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.2 μm filtered solution of 20mM PB,150mM NaCl,pH7.4.Contact us for customized product form or formulation.

Reconstitution

Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water.

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.

Basic Information

Description

Recombinant Human IgG4 Fc Protein is produced by Human Cells expression system. The target protein is expressed with sequence (Glu99-Gly326) of human IgG4 Fc (Accession #P01861).

Bio-Activity

Storage

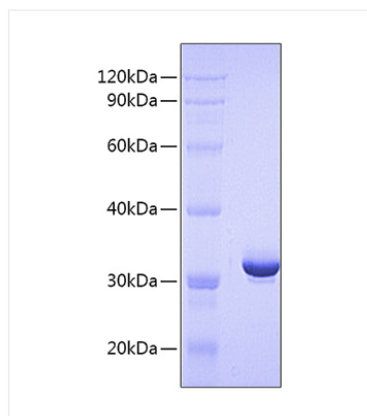
Store the lyophilized protein at -20°C to -80 °C for long term. After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week. Avoid repeated freeze/thaw cycles.

Contact



www.abclonal.com

Validation Data



Recombinant Human IgG4 Fc Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.