



# Recombinant Human IgG2 Fc (223AA)

<b>Catalog #</b>	EPT287
<b>Expression Host</b>	Human Cells
<b>DESCRIPTION</b>	Recombinant Human Ig Gamma-2 Chain C Region is produced by our Mammalian expression system and the target gene encoding Val104-Lys326(Val161Met,Ser257Ala) is expressed.
<b>Accession</b>	P01859
<b>Synonyms</b>	Ig gamma-2 chain C region,IgG2 Fc
<b>Mol Mass</b>	25.1 KDa
<b>AP Mol Mass</b>	32 KDa, reducing conditions
<b>Purity</b>	Greater than 95% as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	Less than 0.1 ng/ $\mu$ g (1 EU/ $\mu$ g) as determined by LAL test.
<b>FORMULATION</b>	Lyophilized from a 0.2 $\mu$ m filtered solution of 20mM PB, 150mM NaCl, pH 7.4.
<b>RECONSTITUTION</b>	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.

## SHIPPING

The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

## STORAGE

Lyophilized protein should be stored at  $< -20^{\circ}\text{C}$ , though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at  $4-7^{\circ}\text{C}$  for 2-7 days.

Aliquots of reconstituted samples are stable at  $< -20^{\circ}\text{C}$  for 3 months.

## 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,





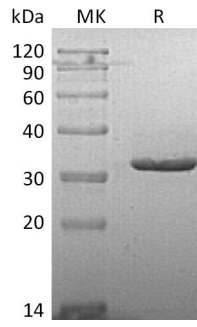
complement activation, toxin neutralization, as well as the antibody-dependent cell-mediated cytotoxicity (ADCC). IgG tetramer contains two heavy chains (50 kDa ) and two light chains (25 kDa) linked by disulfide bonds, that is the two identical halves form the Y-like shape. IgG is digested by pepsin 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.





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## SDS-PAGE



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