# **Recombinant Human IgG1 Protein**



## **RPCB2072**

## **Product Information**

Product SKU: RPCB2072 Gene ID: 3500 Size: 50μg

Tag: C-His Reactivity: Human

### **Additional Information**

**Expression Host**: HEK293 cells **Swissprot**: P01857

**Purity**: > 95% by SDS-PAGE.

#### **Protein Information**

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 antibody-dependent cell-mediated cytotoxicity (ADCC). IgG tetramer contains two heavy chains (5 kDa ) and two light chains (25 kDa) linked by disulfide bonds, that is the two identical halves form the Ylike 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 (FcyR) 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.

Protein Description: High quality, high purity and low endotoxin recombinant Recombinant Human IgG1

Protein, tested reactivity in HEK293 cells and has been validated in SDS-PAGE.100%

guaranteed.

**Endotoxin**: <0.1EU/μg

**Formulation**: Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

**Storage**: Store at -20°C.Store the lyophilized protein at -20°C to -80 °C up to 1 year from the

date of receipt.After reconstitution, the protein solution is stable at -20°C for 3

months, at 2-8°C for up to 1 week.