

Recombinant Protein Technical Manual Recombinant Human IgG1 Fc Protein (Active)

RPES0971

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| Product SKU: RPES0971 | Size: 10µg |
|-----------------------|------------------------------|
| Species: Human | Expression host: Human Cells |
| Uniprot: P01857 | |

| Protein Information: | | | |
|----------------------|--|--|--|
| Molecular Mass: | 41.6 kDa | | |
| AP Molecular Mass: | 32 kDa | | |
| Tag: | | | |
| Bio-activity: | Immobilized Human IgG1 Fc at 2μg/ml(100 μl/well) can bind Human CD64-His(Cat: PKSH033655). The ED50 of Human IgG1 Fc is 47.99 ng/ml . | | |
| Purity: | > 95 % as determined by reducing SDS-PAGE. | | |
| Endotoxin: | < 1.0 EU per μg as determined by the LAL method. | | |
| Storage: | Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. | | |
| Shipping: | This product is provided as lyophilized powder which is shipped with ice packs. | | |
| Formulation: | Lyophilized from a 0.2 μ m filtered solution of 20mM PB,150mM NaCl,pH7.4. | | |
| Reconstitution: | Please refer to the printed manual for detailed information. | | |
| Application: | Functional ELISA | | |
| Synonyms: | g gamma chain C region;IGHG1 | | |

Sequence: Asp104-Lys330

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 (FcyR) on phagocytic cells with high affinity.