

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 $\mu g$ 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 $\mu$ 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.