

## Active Recombinant Human IGHG1 protein, Fc/Avi-tagged,

Cat. No. IGHG1-051H Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Human IGHG1 protein, fused to Fc/Avi tag at the C-terminus, was expressed in HEK293 cells .
<b>Species</b>	Human
<b>Source</b>	HEK293
<b>Description</b>	<p>IGHG1 is the crystallizable fragment in the constant region of the human immunoglobulin heavy chain. Members of the immunoglobulin superfamily (IgSF) consist of two heavy (H) and two light (L) chains, with each component containing one variable (V) and one or more constant (C) domains (1, 2). Produced by B lymphocytes, Ig gamma (IgG) is the predominant isotype found in the body and has the longest half-life of all immunoglobulin isotypes (3). Four IgG subclasses (IgG1-4) were identified based on structural, antigenic and functional differences in the constant region of the heavy chain. The constant tail of the antibody is where proteins involved in immune responses typically bind, most notably the first component of the complement pathway, C1q, and Fc receptors found on immune cells such as B lymphocytes. Affinities for C1q and Fc gamma receptor (Fc gamma R) differ among the IgG subclasses. Fc receptors mediate the recruitment of immune cells to a site of infection (4). Engineered crystallizable fragment (Fc) regions of antibody which assume a unique and unprecedented asymmetric structure within the homodimeric Fc polypeptide, enable completely selective binding to the complement component C1q and activation of complement via the classical pathway without any concomitant engagement of the Fc gamma R (5).</p>

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<b>Predicted N Terminal</b>	Ile
<b>Form</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.
<b>Bio-activity</b>	When Biotinylated Recombinant Human IgG1 Fc Avi-tag is immobilized at 2 g/mL (100 µ/well) , it binds to Human Ighg1 with an ED50 of 0.2-2.0 µg/mL.
<b>Molecular Mass</b>	30-42 kDa
<b>Endotoxin</b>	<0.10 EU per 1 µg of the protein by the LAL method.
<b>Purity</b>	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
<b>Applications</b>	Bioactivity
<b>Storage</b>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.12 months from date of receipt, -20 to -70 °C as supplied.1 month, 2 to 8 °C under sterile conditions after reconstitution.3 months, -20 to -70 °C under sterile conditions after reconstitution.
<b>Reconstitution</b>	Reconstitute at 500 µg/mL in PBS.

## GENE INFORMATION

<b>Gene Name</b>	IGHG1 Immunoglobulin heavy constant gamma 1(G1m marker) [ Homo sapiens ]
<b>Official Symbol</b>	IGHG1
<b>Synonyms</b>	IGHG1; Immunoglobulin heavy constant gamma 1(G1m marker);

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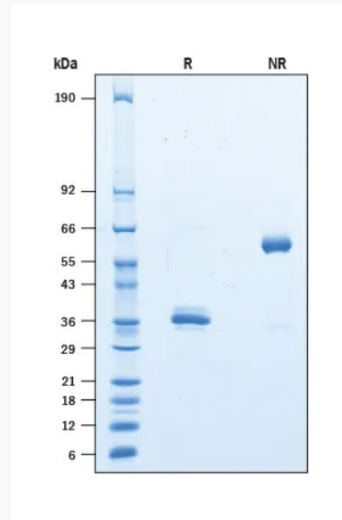
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**Gene ID** 28221

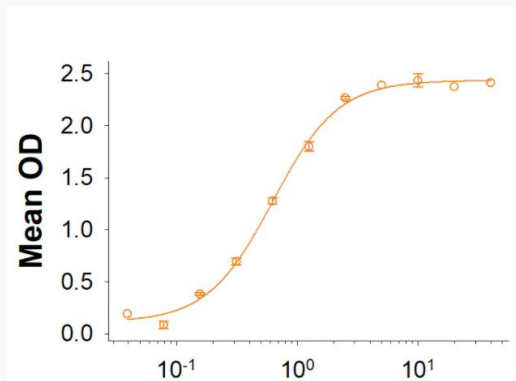
**UniProt ID** P01857

**SDS-PAGE**



2 µg/lane Protein was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining.

**Binding Activity**



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