

Human IgG1 Fc Protein; His Tag

Product Information

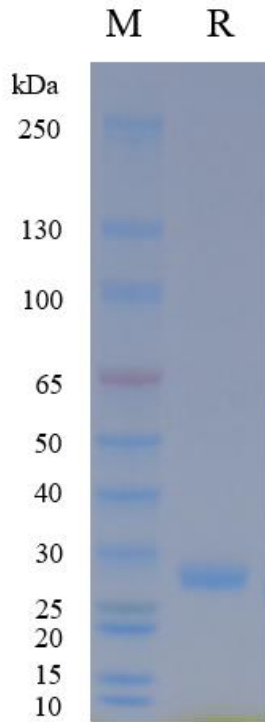
Product Name	Human IgG1 Fc Protein; His Tag
Storage temp	Store at $\leq -70^{\circ}\text{C}$, stable for 6 months after receipt. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.
Catalog# / Size	GM-88587RP-100 / 100 μg GM-88587RP-1000 / 1 mg

Protein Information

Alternative Names	IgG1 Fc
Source	Human IgG1 Fc Protein; His Tag (GM-88587RP) is expressed from human 293 cells (HEK-293). It contains AA Pro 100 - Lys 330 (Accession # P01857-1). This protein carries a His tag at the N-terminus.
Purity	> 95% as determined by SDS-PAGE
Endotoxin	< 1 EU/ μg , determined by LAL gel clotting assay
Predicted Mol Mass	26.8 KDa
Formulation	Supplied as a 0.2 μm filtered solution of PBS, pH7.2-7.4.
Description	IgG1 Fc protein is a functional fragment of immunoglobulin G1 (IgG1), which belongs to the antibody superfamily. It is encoded by the constant region of the IGHG1 gene and is a protein associated with the human immune system. IgG1 Fc protein is derived from the constant region of the IgG1 heavy chain and is widely expressed in plasma and lymphoid tissues. IgG1 Fc protein regulates the activity of various immune cells, including natural killer (NK) cells, macrophages, and dendritic cells, by binding to Fc gamma receptors (Fc γ R) on the surface of these cells. Fc γ R-expressing immune cells are important effectors of the immune system, with the ability to mediate antibody-dependent cellular cytotoxicity (ADCC), phagocytosis, and cytokine release, making them crucial members of the immune system. Research indicates that IgG1 Fc protein plays a significant role in regulating immune cell activity, promoting cytotoxicity against targeted cells, and modulating inflammatory responses. Additionally, the engineered forms of IgG1 Fc protein have been developed to enhance or reduce immune effector functions, making it a potential therapeutic target and platform for antibody-based immunotherapies, including the treatment of cancer, autoimmune diseases, and inflammatory disorders.

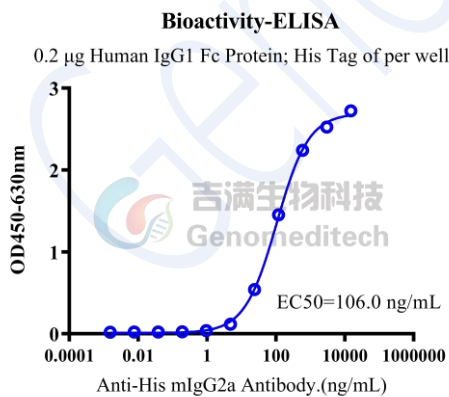
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SDS-PAGE

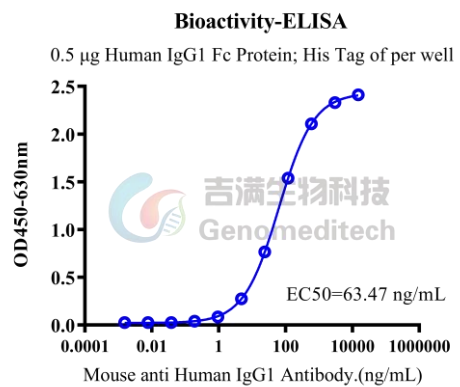


On SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA



Human IgG1 Fc Protein; His Tag (Catalog # GM-88587RP) was immobilized at 5 μ g/ml (100 μ L/well). Increasing concentrations of Anti-His mIgG2a Antibody (Catalog # GM-59493AB) were added.



Human IgG1 Fc Protein; His Tag (Catalog # GM-88587RP) was immobilized at 5 μ g/ml (100 μ L/well). Increasing concentrations of Mouse anti Human IgG1 Antibody (Catalog # GM-87811AB) were added.