

# Recombinant Human IgA1 Protein

Catalog No.: RPT0023 **Recombinant**

## Sequence Information

Species	Gene ID	Swiss Prot
Human	3493	P01876-1

### Tags

N-His

### Synonyms

Immunoglobulin heavy constant alpha 1; Ig alpha-1 chain C region; Ig alpha-1 chain C region BUR; Ig alpha-1 chain C region TRO ;IGHA1 ;IgA1

## Product Information

Source	Purification
HEK293 cells	> 95% by SDS-PAGE.

**Calculated MW** **Observed MW**

### Endotoxin

<1EU/μg of the protein by LAL method

### Formulation

Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.

### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

## Contact

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## Background

Recombinant Human IgA1 Protein □Constant region of immunoglobulin heavy chains. Immunoglobulins, also known as antibodies, are membrane-bound or secreted glycoproteins produced by B lymphocytes. In the recognition phase of humoral immunity, the membrane-bound immunoglobulins serve as receptors which, upon binding of a specific antigen, trigger the clonal expansion and differentiation of B lymphocytes into immunoglobulins-secreting plasma cells. Secreted immunoglobulins mediate the effector phase of humoral immunity, which results in the elimination of bound antigens. The antigen binding site is formed by the variable domain of one heavy chain, together with that of its associated light chain. Thus, each immunoglobulin has two antigen binding sites with remarkable affinity for a particular antigen. The variable domains are assembled by a process called V-(D)-J rearrangement and can then be subjected to somatic hypermutations which, after exposure to antigen and selection, allow affinity maturation for a particular antigen.

## Basic Information

### Description

Recombinant Recombinant Human IgA1 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Cys122-Tyr353) of Human IgA1 (Accession #P01876-1) fused with His tag at the N-terminus.

### Bio-Activity

Measured by its binding ability in a functional ELISA. Immobilized Human IGHAI1 (Catalog: RPT0023) at 5 μg/mL (100 μL/well) can bind Human CD89/FCAR (Catalog: RP00113) with a linear range of 0.01-7.4 ng/mL.

### Storage

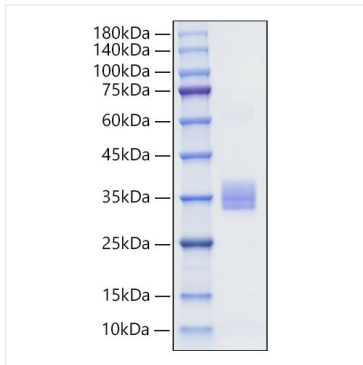
Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

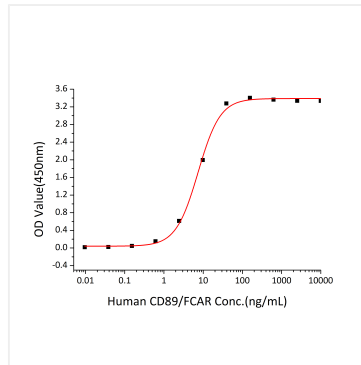
Avoid repeated freeze/thaw cycles.

## Validation Data

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Recombinant Human IgA1 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 30-40 kDa.



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