

# Product Information

## Anti-Human IgG Protein A scaffold

Cat. No.: **AFB-31LY**

This product is for research use only and is not intended for diagnostic use.

### Product Overview

The Anti-IgG Protein A Scaffold molecule binds with high affinity to human IgG of IgG1, IgG2 and IgG4 subclasses which comprise 92-98% of total IgG in a normal individual. The Anti-IgG Protein A Scaffold molecule is well suited for affinity chromatography, depletion of IgG from human serum and can be used as a detection reagent in a variety of assays. The Anti-IgG Protein A Scaffold molecule is modified with a unique C-terminal cysteine for directed single-point chemical modification, facilitating labeling with fluorescent dyes, biotin or coupling to matrices.

### Antigen Description

Immunoglobulin G (IgG), is one of the most abundant proteins in human serum with normal levels between 8-17 mg/ml in adult blood. IgG is important for our defence against microorganisms and the molecules are produced by B-lymphocytes as a part of our adaptive immune response. The IgG molecule has two separate functions; to bind to the pathogen that elicited the response and to recruit other cells and molecules to destroy the antigen. The variability of the IgG pool is generated by somatic recombination and the number of specificities in an individual at a given time point is estimated to be 1011 variants.

### Specific Activity

Anti-IgG Protein A scaffold molecule binds to the Fc part of IgG from several species; human; mouse; rabbit and monkey (Rhesus) with similar binding preferences as Protein A in terms of sub-class specificities.

### Source

Display library

### Species Reactivity

human

### Expression Host

E. coli

### Applications

Affinity Chromatography.

### Molecular Weight

14.1 kDa

### Storage

At +4°C is recommended for lyophilized protein. For reconstituted protein in physiological buffer, short-term storage at +4°C is recommended. For long-term storage, the protein solution should first be aliquoted and stored frozen at -20°C. There is no D

## ANTIGEN GENE INFORMATION

### Gene Name

[IGHG1 immunoglobulin heavy constant gamma 1 \(G1m marker\) \[ Homo sapiens \]](#)

**Official Symbol**

IGHG1

**Synonyms**

immunoglobulin heavy constant gamma 1 (G1m marker); IGHG1; Ig gamma 1 chain C region; Immunoglobulin heavy constant gamma 1; Immunoglobulin G; IgG

**Gene ID**

[3500](#)

**MIM**

[147100](#)

**UniProt ID**

P01857

**Chromosome Location**

14q32.33

**Pathway**

IL4-mediated signaling events.

**Function**

Antigen binding; protein binding.