

Product Information

Anti-Human IgG Protein A scaffold, Biotin-Conjugated

Cat. No.: **AFB-32LY**

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 Biotin-Conjugated Anti-IgG Protein A Scaffold molecule is biotinylated at a unique C-terminal cysteine using a maleimide-biotin reagent, facilitating immobilization on various streptavidin coated solid supports.

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

14.6 kDa

Storage

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 decrease in performance of the biotinylated Protein A Scaffold molecule after 10 repeated freeze and thaw cycles

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.