Datasheet for ABIN964323

Human IgG isotype control (Biotin)

3 Images

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Overview

Quantity:	1 mg
Target:	IgG
Host:	Human
Conjugate:	Biotin
Application:	ELISA, Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Purpose:	Human IgG Whole Molecule Biotin Conjugated
Isotype:	IgG
Cross-Reactivity (Details):	Human IgG whole molecule Biotin conjugated was assayed by immunoelectrophoresis resulted in a single precipitin arc against anti-biotin, anti-Human IgG and anti-Human Serum.
Characteristics:	Human IgG Biotin conjugation, Human immunoglobulin G, Vitamin H, coenzyme R
Purification:	Human IgG whole molecule Biotin conjugated was prepared from normal serum delipidation, salt fractionation, ion exchange chromatography followed by extensive dialysis against the buffer stated above.
Labeling Ratio:	10-20

Target Details

Target:	IgG
Abstract:	IgG Products
Target Type:	Antibody

Target Details

Background:	Background: Secreted as part of the adaptive immune response by plasma B cells, immunoglobulin G constitutes 75 % of serum immunoglobulins. Immunoglobulin G binds to viruses, bacteria, as well as fungi and facilitates their destruction or neutralization via agglutination (and thereby immobilizing them), activation of the compliment cascade, and opsonization for phagocytosis. The whole IgG molecule possesses both the F(c) region, recognized by high-affinity Fc receptor proteins, as well as the F(ab) region possessing the epitope-recognition site. Both heavy and light chains of the antibody molecule are present. This Human IgG whole molecule is conjugated to biotin (Vitamin H), a small biomolecule that has a large affinity for avidin and streptavidin.

Application Details

Application Notes:	Immunohistochemistry Dilution: 1:500 Application Note: Human IgG whole molecule Biotin conjugated has been tested in ELISA and can be utilized as a control reagent in both Western Blotting and ELISA format experiments. Western Blot Dilution: 1:1000 ELISA Dilution: 1:5000 - 1:50,000 Other: User Optimized
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Reconstitution Buffer: Restore with deionized water (or equivalent) Reconstitution Volume: 1.0 mL
Concentration:	1.0 mg/mL
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free Preservative: 0.01 % (w/v) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20°

Handling

	C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. Human IgG whole molecule Biotin conjugated is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiry Date:	12 months

Images

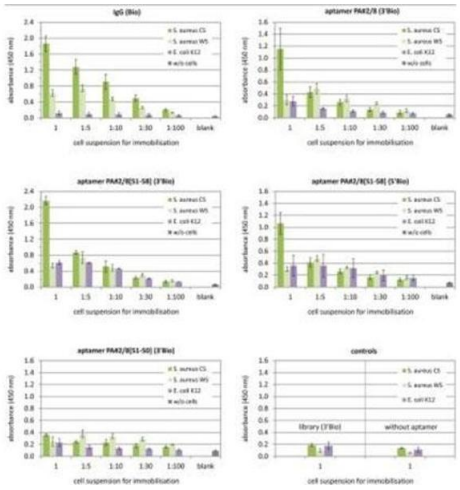
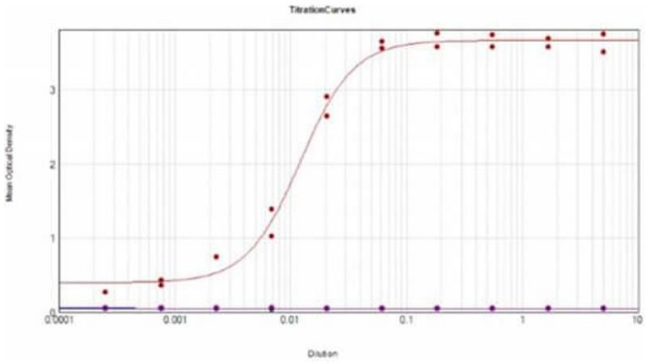


Image 1. Evaluation of binding ability of aptamer PA#2/8 and PA#2/8[S1-58] to bacterial cells of S. aureus by ELONA. Formaldehyde-fixed cells of S. aureus CS (Protein A-producing Cowan strain) and S. aureus WS (Protein A-deficient Wood46 Strain) as well as living cells of E. coli K12 as negative control were used for coating the microtiter plates. Cell suspensions with an OD600=0.7 (1) and further stepwise dilutions (1:5, 1:10, 1:30, 1:100, corresponding to OD600=0.14, 0.07, 0.023, 0.007) were applied. 100nM of each biotinylated aptamer variants was added, respectively, for binding. The blank reaction represents the assay control without any cell coating. A positive control for binding to immobilised cells is represented by adding of 0.13nM biotinylated IgG. Negative controls include reactions with the library (3'Bio), non-functional aptamer variant PA#2/8[S1-50] (3'Bio), and without biotinylated aptamer or IgG. Averaged results are shown: 2-3 separate experiments per aptamer probe and 11 experiments with IgG, whereby each of them was made with 2-3 replicates of each specific interaction. All experiments contained 1 control reaction per cell type with the library and 3 control reactions per cell type without aptamer probes or IgG. Figure 5. PMID: 27650576.



ELISA

Image 2. ELISA Results of Human IgG Whole Molecule Biotin Conjugated. Each well was coated in duplicate with 1.0 µg of Human IgG Whole Molecule Biotin Conjugate. The working dilution is 82,800. The starting dilution of antibody was 5 µg/mL and the X-axis represents the Log10 of a 3-fold dilution. This titration is a 4-parameter curve fit where the IC50 is defined as the titer of the antibody. Assay performed using Streptavidin-HRP (p/n S000-03) and TMB substrate (p/n TMBE-1000).

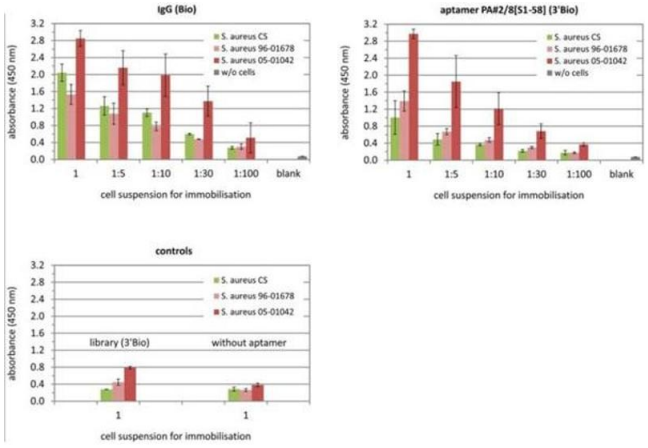


Image 3. Binding ability of aptamer PA#2/8[S1-58] to living cells of S. aureus. Two S. aureus isolates 96-01678 and 05-01042 as well as formaldehyde-fixed cells of S. aureus CS (Protein A-producing Cowan strain) were used for coating the microtiter plates. Cell suspensions with an OD600=0.7 (1) and further stepwise dilutions (1:5, 1:10, 1:30, 1:100) were applied. 100nM of PA#2/8[S1-58] (3'Bio) were added for binding in comparison to 0.13nM IgG (Bio) as positive control for binding to immobilised cells. The blank reaction represents the assay control without any cell coating. Negative controls include reactions with the library (3'Bio) and without biotinylated aptamer or IgG. The results of 2 separate experiments were averaged, whereby each of them was made with 1 (IgG) or 2 (aptamer) replicates of each specific interaction. All experiments contained 1 control reaction per cell type with the library and 3 control reactions per cell type without aptamer or IgG binding reagent. Figure 6. PMID: 27650576.