

Datasheet for 009-0606

Human IgA Biotin

Overview

Description:	Human IgA Whole Molecule Biotin Conjugated - 009-0606
Item No.:	009-0606
Size:	1 mg
Applications:	Microarray
Origin:	Human

Product Details

Background:	Immunoglobulin A is the primary responder in mucosal immunity, and comprises close to 75% of the total immunoglobulin produced. IgA can also be secreted and is protected from degradation by many proteolytic enzymes (which allows it to be secreted along the gastrointestinal tract). Immunoglobulin A only weakly activates the complement system and is not readily opsonized.
Synonyms:	Human IgA Whole Molecule Biotin Conjugate
Species of Origin:	Human
Conjugate:	Biotin
Format:	IgA
Type:	Native Protein

Target Details

Purity/Specificity:	This product was prepared from normal serum by delipidation, salt fractionation, ion exchange chromatography followed by extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-biotin, anti-Human IgA (a chain specific) and anti-Human Serum. No reaction was observed against anti-Human IgG F(c) or anti-Human IgM (Fc5μ).
Relevant Links:	• 009-0606 SDS

Application Details

Suggested Applications:	Microarray (Based on references)
Application Note:	Human IgA whole molecule Biotin is designed for ELISA and western blotting. This product is also suitable for multiplex analysis, including multicolor imaging, utilizing various commercial platforms.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

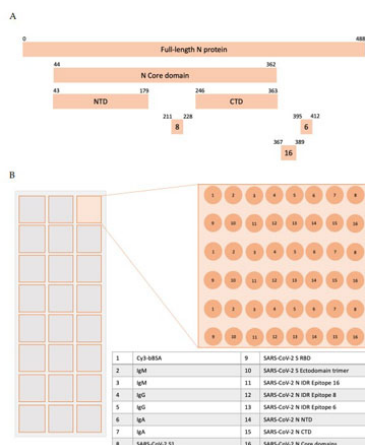
Formulation

Physical State:	Lyophilized
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	1.0 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Figure

SARS-CoV-2 N protein amino acid coverage on SARS-CoV-2 microarray. (A) Final N protein constructs fabricated on the SARS-CoV-2 microarray, including the full-length protein, core domain (amino acids 44-362), N-terminal domain (NTD) (amino acids 43-179), C-terminal domain (CTD) (amino acids 246-363), peptide 6 (amino acids 395-412), peptide 8 (amino acids 211-228) and peptide 16 (amino acids 367-389). (B) Final microarray layout: 24-plex array with 16 probes (summarized in the Table insert) printed in triplicate. Control antigens used in the microarray included 50 µg/mL of biotinylated human immunoglobulins G, A, and M (hIgG, hIgA, and hIgM, respectively; Rockland, Gilbertsville, PA, USA) and 132 µg/mL of biotinylated anti-human immunoglobulin G (anti-hIgG; Rockland) as well as in house derivatized NHS-ester-Cy3 (Thermo Scientific) biotinylated BSA (Cy3-BSA) at 40 µg/mL. Figure S2. PMID: 33925055.

References

- Smith M et al. Age, Disease Severity and Ethnicity Influence Humoral Responses in a Multi-Ethnic COVID-19 Cohort. *Viruses*. (2021)

Disclaimer

No test method can provide total assurance that the hepatitis B virus, hepatitis C virus, human immunodeficiency virus, or any other infectious agents are absent. Thus, all blood products, including purified proteins derived from human blood sources, should be handled at Biosafety Level 2 as recommended by the CDC\NIH manual entitled Biosafety in Microbiological and Biomedical Laboratories for potentially infectious human serum, blood specimens or proteins derived from same. Source material for the human blood product supplied to your facility has been tested for the detection of HIV antibody, Hepatitis B surface antigen, antibody to Hepatitis C, HIV 1 antigen(s), antibody to HTLV - I/II, and syphilis by FDA guidelines. All units were found to be non-reactive/negative for these tests. All human blood source material is collected in FDA licensed centers and is tested with FDA approved test kits.

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.