

Datasheet for 209-1102

Human IgG (H&L) Antibody**Overview**

Description:	Goat Anti-Human IgG (H&L) Antibody - 209-1102
Item No.:	209-1102
Size:	50 mg
Applications:	Microarray
Reactivity:	Human
Host Species:	Goat

Product Details

Background:	Anti-Human IgG (H&L) generated in goat detects human Immunoglobulin G (IgG), both heavy and light chains of the antibody molecule are present. It is a protein complex composed of four peptide chains — two identical heavy chains and two identical light chains arranged in a Y-shape typical of antibody monomers. Each IgG has two antigen binding sites. Representing approximately 75% of serum immunoglobulins in humans, IgG is the most abundant antibody isotype found in the circulation. IgG molecules are synthesized and secreted by plasma B cells. Secondary Antibodies are available in a variety of formats and conjugate types. When choosing a secondary antibody product, consideration must be given to species and immunoglobulin specificity, conjugate type, fragment and chain specificity, level of cross-reactivity, and host-species source and fragment composition.
Synonyms:	goat anti-human IgG, Anti-Human Ab, Human Secondary Antibody, Goat Anti-Human, Human Antibody in Human
Host Species:	Goat
Specificity:	IgG (H&L)
Clonality:	Polyclonal
Format:	IgG

Target Details

Reactivity:	Human
Immunogen:	Human IgG whole molecule

Purity/Specificity:	Anti-HUMAN IgG (H&L) (GOAT) antibody is an IgG fraction antibody purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Goat Serum, Human IgG and Human Serum.
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Relevant Links:	• 209-1102 SDS
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Application Details

Suggested Applications:	Microarray (Based on references)
Application Note:	Suitable for immunoblotting (western or dot blot), ELISA, immunoelectron microscopy and immunohistochemistry as well as other antibody based enzymatic assays requiring lot-to-lot consistency. Specific conditions should be optimized by researcher.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:20,000 - 1:100,000
IHC:	1:1,000 - 1:5,000
WB:	1:2,000 - 1:10,000

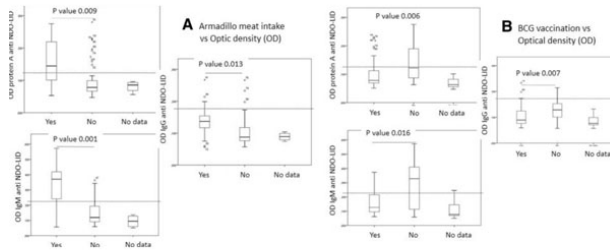
Formulation

Physical State:	Lyophilized
Concentration:	10 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Reconstitution Volume:	5.0 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



ELISA

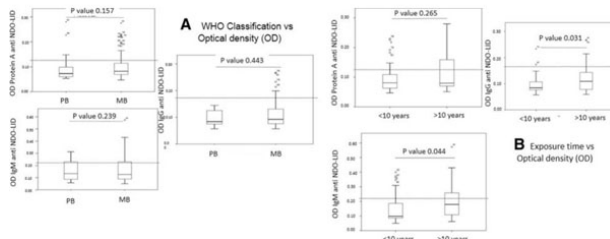
ELISA results using Goat Anti-Human IgG.

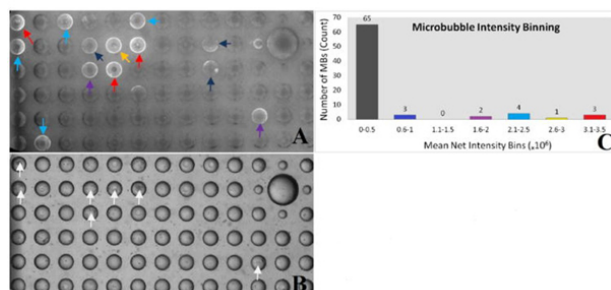
Impact of behavioral variables on *M. leprae* infection levels. Anti-natural octyl disaccharide-leprosy IDRI diagnostic (NDO-LID) antibody levels in children and adolescents were measured by ELISA, using either protein A, anti- IgM or anti-IgG to detect responses. In a, samples were stratified by recorded knowledge of eating armadillo meat as either yes ($n = 14$) or no ($n = 64$). In b, samples were stratified by recorded knowledge of BCG re-vaccination following identification of the index leprosy case as either yes ($n = 54$) or no ($n = 16$). Data are displayed as box and whisker plots, with the box representing the Q1 to Q3 interquartile range and the horizontal bar representing the median of the optical density of the samples. Individual dots indicate outliers, and p-values are indicated by the lines above each indicated group. Fig. 2. PMID: 31196008.

ELISA

ELISA results using Goat Anti-Human IgG.

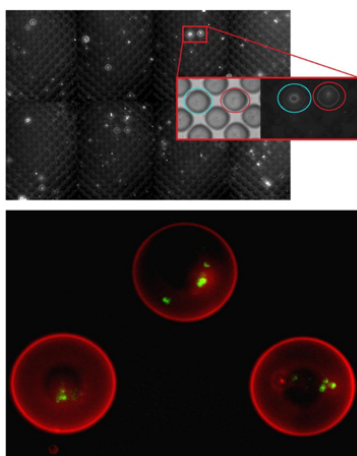
Influence of index case on *M. leprae* infection levels. Anti-natural octyl disaccharide-leprosy IDRI diagnostic (NDO-LID) antibody levels in children and adolescents were measured by ELISA, using either protein A, anti- IgM or anti-IgG to detect responses. In a, samples were stratified by reported WHO operational classification of the index case as either MB ($n = 66$) or PB ($n = 16$). In b, samples were stratified by estimated duration of exposure to the index leprosy case as either less than 10 years ($n = 45$) or greater than 10 years ($n = 37$). Data are displayed as box and whisker plots, with the box representing the Q1 to Q3 interquartile range and the horizontal bar representing the median of the optical density of the samples. Individual dots indicate outliers, and p-values are indicated by the lines above each indicated group. Fig. 3. PMID: 31196008.





ELISA

Ring development signifying tetanus toxoid specific IgG secretion from MBs of interest. A) Fluorescent image, B) Corresponding bright-field image white arrows represent wells containing >8 cells, C) Binned fluorescence intensity of MB's in field of view, bin colors correspond to arrow colors in (A). Fig 3. PMID: 25079889



ELISA

Top (Fig 6.): Stitched scan of MB array containing approximately 900 MBs. Cells were seeded and the MB array was imaged following 2 days of incubation. MB with fluorescent rings around them are considered positive wells.

Bottom (Fig 7.): Representative image from area on a MB array seeded with primary B cells showing MB's positive for live cells (Green) which are additionally secreting IgG (Red). PMID: 25079889

References

- Serrano-Coll, H et al. Social and environmental conditions related to Mycobacterium leprae infection in children and adolescents from three leprosy endemic regions of Colombia. *Bmc Infectious Diseases* (2019)
- Metz I, Beißbarth T, Ellenberger D, et al. Serum peptide reactivities may distinguish neuromyelitis optica subgroups and multiple sclerosis. *Neurol Neuroimmunol Neuroinflamm.* (2016)
- Bucukovski, J et al. A Multiplex Label-Free Approach to Avian Influenza Surveillance and Serology. *PLoS One* (2015)
- Bobo, B et al. Microbubble array diffusion assay for the detection of cell secreted factors. *Lab on a Chip* (2014)

Disclaimer

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.