

Datasheet for 209-4302**Human IgG (H&L) Antibody Peroxidase Conjugated****Overview**

Description:	Rabbit Anti-Human IgG (H&L) Antibody Peroxidase Conjugated - 209-4302
Item No.:	209-4302
Size:	20 mg
Applications:	ELISA
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	Anti-Human IgG (H&L) Peroxidase generated in rabbit 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:	rabbit anti-Human IgG peroxidase Conjugated Antibody, rabbit anti-Human IgG HRP Conjugated Antibody, rabbit anti-Human IgG Antibody peroxidase Conjugation
Host Species:	Rabbit
Specificity:	IgG (H&L)
Conjugate:	Peroxidase (HRP)
Clonality:	Polyclonal
Format:	IgG

Target Details

Reactivity:	Human
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Immunogen:	Human IgG whole molecule
Purity/Specificity:	This product 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-Peroxidase, anti-Rabbit Serum, Human IgG and Human Serum.

Application Details

Suggested Applications:	ELISA (Based on references)
Application Note:	Secondary antibody reagents are ideal for ELISA, western blotting, Immunohistochemistry, Fluorescence Microscopy, Flow Cytometry as well as other antibody detection methods.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:50,000
IHC:	1:500 - 1:2,500
WB:	1:1,000 - 1:10,000

Formulation

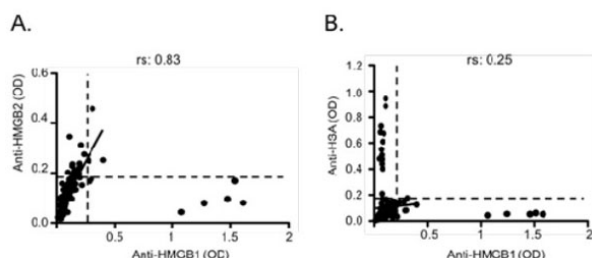
Physical State:	Lyophilized
Concentration:	10.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	None
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	2.0 mL
Reconstitution Buffer:	Restore 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

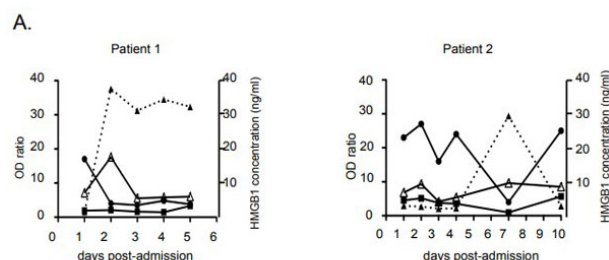


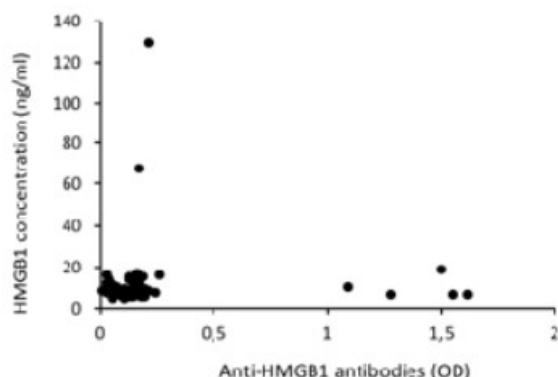
ELISA

Correlation between anti-HMGB1 and anti-HMGB2 (A), and anti-HSA (B) IgG titers. Autoantibodies directed to HMGB1, HMGB2 and HSA were detected by indirect ELISA. Results are expressed as optical density (OD) values at 405 nm. The dotted lines correspond to the cut-off values defined as the mean OD plus three standard deviations obtained on a group of 100 plasma samples from apparently healthy blood donors. Dots represent 178 measurements performed in 40 patients with septic shock at various time intervals ranging from 1 to 18 days. Spearman coefficient (r) is depicted within the graph. Fig 1. PMID: 31767118.

ELISA

(A) Time course detection of HMGB1 and IgG against anti-HMGB1 (black triangle), anti-HMGB2 (black square) and anti-EBNA1 (black circle) on sequential plasma from patients 1 and 2. OD ratios were defined as the ratio of the OD measured for a given antigen over the OD value obtained anti-HSA. HMGB1 concentration (open triangle) is indicated. (B) The same samples were subjected to an indirect immunoblot by using independent filter strips loaded with both rhHMGB1 and rEBNA1. Fig 2. PMID: 31767118.





ELISA

ELISAs were performed to measure HMGB1 plasma concentration as well as IgG directed HMGB1 on a series of 55 plasma samples from 11 patients' samples – including plasma from patients 1 and 2 – containing low or high level of autoantibodies to HMGB1. Spearman correlation coefficient was 0.17. Supplementary figure 3. PMID: 31767118.

References

- Barnay-Verdier S et al. Emergence of antibodies endowed with proteolytic activity against High-mobility group box 1 protein (HMGB1) in patients surviving septic shock. *Cell Immunol.* (2020)

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.