

Datasheet for 609-1316-0100**Human IgG (H&L) Antibody Peroxidase Conjugated Pre-Adsorbed****Overview**

Description:	Goat Anti-Human IgG (H&L) Antibody Peroxidase Conjugated (Min X MOUSE Serum Proteins) - 609-1316-0100
Item No.:	609-1316-0100
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Human
Host Species:	Goat

Product Details

Background:	Anti-Human IgG (H&L) Peroxidase 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 peroxidase conjugated Antibody, goat anti-Human IgG Antibody HRP conjugation
Host Species:	Goat
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:	Human IgG (H&L) Antibody Peroxidase Conjugated was prepared from monospecific antiserum by immunoaffinity chromatography using Human IgG coupled to agarose beads followed by solid phase adsorption(s) to remove any unwanted reactivities. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Peroxidase, anti-Goat Serum, Human IgG and Human Serum. No reaction was observed against Mouse Serum Proteins.

Application Details

Tested Applications:	ELISA, WB
Application Note:	Anti-Human IgG (H&L) Peroxidase Conjugate has been tested by ELISA and western blot and is suitable for immunoblotting (western or dot blot), ELISA, immunoperoxidase electron microscopy and immunohistochemistry as well as other peroxidase-antibody based enzymatic assays requiring lot-to-lot consistency.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:250,000
IHC:	1:500 - 1:2,500
WB:	1:2,000 - 1:20,000

Formulation

Physical State:	Lyophilized
Concentration:	2.0 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) Gentamicin Sulfate. Do NOT add Sodium Azide!
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	100 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
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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.

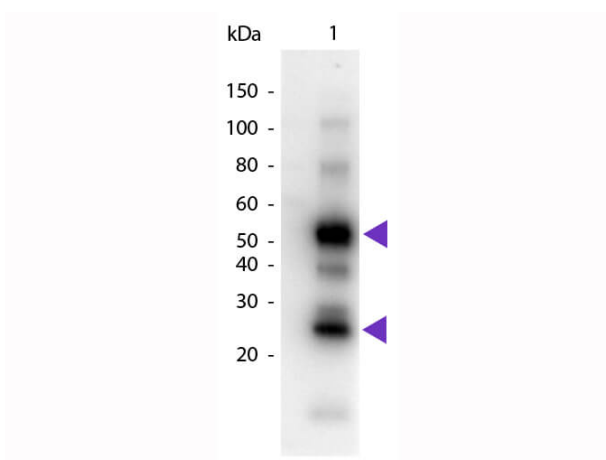
Expiration: Expiration date is one (1) year from date of receipt.

Images

ELISA target and detector	NDO-LID		
	IgM	IgG	IgG/M (protein A)
Sensitivity	78.0 (73.0–83.0)	81.6 (77.0–86.1)	86.3 (82.2–90.3)
Specificity	97.0 (94.0–100)	95.6 (92.0–99.4)	93.6 (93.0–100)
PPV	98.3 (96.5–100)	97.6 (95.5–99.7)	98.1 (96.3–100)
NPV	66.7 (60.0–73.5)	70.2 (63.4–77.1)	76.1 (69.5–82.8)

ELISA

Diagnostic accuracy of detecting IgG and IgG/M antibodies against natural octyl disaccharide-leprosy IDRI diagnostic (NDO-LID) using HRP anti-human IgG (p/n 609-1316), HRP anti-human IgM (p/n 609-4331), and HRP Protein A (p/n PA 00-03). ELISA = enzyme-linked immunosorbent assay; NPV = negative predictive value; PPV = positive predictive value. Results are shown as percent, with confidence intervals in parentheses. Table 5. PMID: 29141725.



Western Blot

Western Blot of Goat anti-Human IgG Pre-Adsorbed Peroxidase Conjugated Secondary Antibody. Lane 1: Human IgG. Lane 2: None. Load: 50 ng per lane. Primary antibody: None. Secondary antibody: Peroxidase goat secondary antibody at 1:1,000 for 60 min at RT. Block: MB-070 for 30 min at RT. Predicted/Observed size: 25 & 55 kDa, 25 & 55 kDa for Human IgG. Other band(s): Human IgG splice variants and isoforms.

References

- Angélica Rita Gobbo et al. NDO-BSA, LID-1, and NDO-LID Antibody Responses for Infection and RLEP by Quantitative PCR as a Confirmatory Test for Early Leprosy Diagnosis. *Front. Trop.* (2022)
- Fox A. et al. Evidence of a significant secretory-IgA-dominant SARS-CoV-2 immune response in human milk following recovery from COVID-19. *medRxiv* (2020)
- Munoz et al. Comparison of Enzyme-Linked Immunosorbent Assay Using Either Natural Octyl Disaccharide-Leprosy IDRI Diagnostic or Phenolic Glycolipid-I Antigens for the Detection of Leprosy Patients in Colombia. *The American Journal of Tropical Medicine and Hygiene* (2018)

Disclaimer

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