

Datasheet for 612-1302**Rat IgG (H&L) Antibody Peroxidase Conjugated****Overview**

Description:	Goat Anti-Rat IgG (H&L) Antibody Peroxidase Conjugated - 612-1302
Item No.:	612-1302
Size:	2 mg
Applications:	ELISA, WB
Reactivity:	Rat
Host Species:	Goat

Product Details**Background:**

Anti-Rat IgG whole molecule antibody generated in goat detects specifically Rat IgG whole molecule. 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 complement 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 the Heavy and Light chains of the antibody molecule are present. 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. Goat Anti-Rat IgG peroxidase Conjugated Antibody is ideal for investigators who routinely perform ELISA, Sandwich ELISA, titration assays, western-blot, immunoprecipitation and more generally immunoassays.

Synonyms:	Goat Anti-Rat IgG peroxidase Conjugated Antibody, Goat Anti-Rat IgG Antibody HRP Conjugation
Host Species:	Goat
Specificity:	IgG (H&L)
Conjugate:	Peroxidase (HRP)
Clonality:	Polyclonal
Format:	IgG

Target Details

Reactivity:	Rat
Immunogen Type:	Native Protein
Immunogen:	Anti-Rat IgG whole molecule was produced by repeated immunization with Rat IgG whole molecule in goat.
Purity/Specificity:	This product was prepared from monospecific antiserum by immunoaffinity chromatography using Rat 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, Rat IgG and Rat Serum.

Application Details

Tested Applications:	ELISA
Suggested Applications:	WB (Based on references)
Application Note:	Anti-Rat IgG HRP Conjugate has been tested by ELISA 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:	1:50,000 - 1:100,000
IHC:	1:500 - 1:1,500
WB:	1:2,000 - 1:10,000

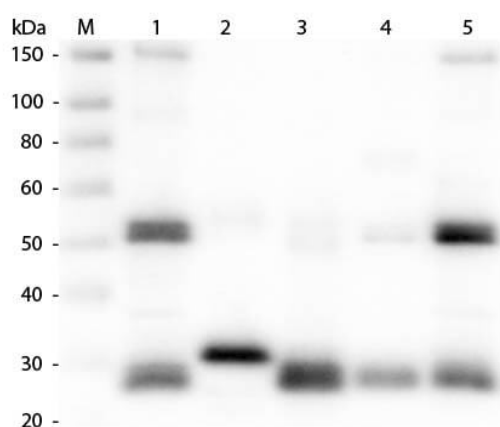
Formulation

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:	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



Western Blot

Western Blot of Anti-Rat IgG (H&L) (GOAT) Antibody (p/n 612-1102). Lane M: 3 µl Molecular Ladder. Lane 1: Rat IgG whole molecule (p/n 012-0102). Lane 2: Rat IgG F(c) Fragment (p/n 012-0103). Lane 3: Rat IgG Fab Fragment (p/n 012-0105). Lane 4: Rat IgM Whole Molecule (p/n 012-0107). Lane 5: Rat Serum (p/n D310-05). All samples were reduced. Load: 50 ng per lane. Block: MB-070 for 30 min at RT. Primary Antibody: Anti-Rat IgG (H&L) (GOAT) Antibody (p/n 612-1102) 1:1,000 for 60 min at RT. Secondary Antibody: Anti-Goat IgG (DONKEY) Peroxidase Conjugated Antibody (p/n CUST10) 1:40,000 in MB-070 for 30 min at RT. Predicted/Observed Size: 25 and 55 kDa for Rat IgG and Serum, 25 kDa for F(c) and Fab, 78 and 25 kDa for IgM. Rat F (c) migrates slightly higher.

References

- Shamseldin MM et al. Prime-Pull Immunization of Mice with a BcfA-Adjuvanted Vaccine Elicits Sustained Mucosal Immunity That Prevents SARS-CoV-2 Infection and Pathology. *J Immunol.* (2023)
- Emanuela Piermarini et al. Frataxin silencing alters microtubule stability in motor neurons: implications for Friedreich's ataxia. *Hum Mol Genet.* (2016)

Disclaimer

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