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Datasheet for 611-1302

Rabbit IgG (H&L) Secondary Antibody Peroxidase Conjugated

Overview

Description:	Goat Anti-Rabbit IgG (H&L) Antibody Peroxidase Conjugated - 611-1302
Item No.:	611-1302
Size:	2 mg
Applications:	ELISA, WB, IHC
Reactivity:	Rabbit
Host Species:	Goat

Product Details

Background:	Anti-Rabbit IgG Antibody peroxidase generated in goat detects rabbit IgG. 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 compliment 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 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. This Anti-Rabbit IgG (H&L) is conjugated to peroxidase.
Synonyms:	Goat anti-Rabbit IgG Secondary Antibody Peroxidase Conjugated, Goat anti-Rabbit IgG Secondary Antibody HRP Conjugated, GAR-HRP, Anti-rabbit secondary antibody, anti-rabbit HRP antibody, horseradish peroxidase conjugated secondary antibody, anti-rabbit horseradish peroxidase conjugated secondary antibody
Host Species:	Goat
Specificity:	IgG (H&L)
Conjugate:	Peroxidase (HRP)
Clonality:	Polyclonal
Format:	IgG

F/P Ratio:	0.453

Target Details

Reactivity:	Rabbit
Immunogen:	Rabbit IgG whole molecule
Purity/Specificity:	RABBIT IgG (H&L) Secondary Antibody Peroxidase Conjugated was prepared from monospecific antiserum by immunoaffinity chromatography using Rabbit IgG coupled to agarose beads. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Peroxidase, anti-Goat Serum, Rabbit IgG and Rabbit Serum.

Application Details

Tested Applications:	ELISA, WB
Suggested Applications:	IHC (Based on references)
Application Note:	Anti-Rabbit IgG Peroxidase Conjugated Antibody has been tested by ELISA and western blot and is suitable for ELISA, Sandwich ELISA, titration assays, western-blot, immunoprecipitation, Immunohistochemistry as well as other HRP antibody based assays. Specific conditions for reactivity and signal detection should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:1,000 - 1:20,000
IHC:	1:500 - 1:2,500
WB:	1:10,000 - 1:20,000

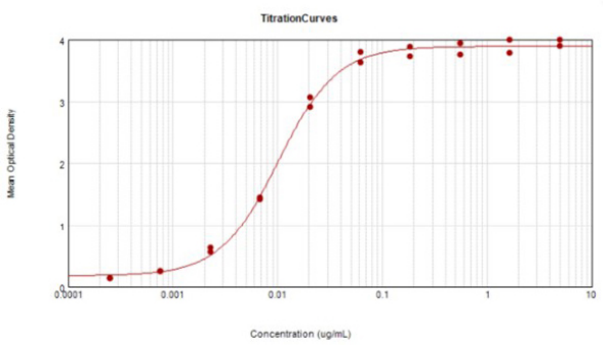
Formulation

Physical State:	Lyophilized
Concentration:	2 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)

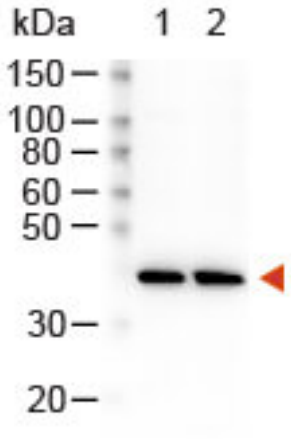
Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store secondary antibody 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 of Goat Anti-Rabbit IgG Antibody Peroxidase Conjugated tested against purified Rabbit IgG protein. Each well was coated in duplicate with 10 µg of Rabbit IgG (p/n 011-0102). The starting dilution of antibody was 5µg/ml and the X-axis represents the Log10 of a 3-fold dilution. The titer is 1:98,500. This titration is a 4-parameter curve fit where the IC50 is defined as the titer of the antibody. Assay performed using 3% fish gelatin as blocking buffer and TMB substrate p/n TMBE-1000.



Western Blot
Western Blot of Peroxidase Conjugated Goat Anti-Rabbit Antibody. Lane 1: HeLa Whole Cell Lysate. Lane 2: NIH/3T3 Whole Cell Lysate. Load: 10 µg per lane. Primary antibody: Beta Actin Antibody at 1:1000 for overnight at 4°C. Secondary antibody: Peroxidase Conjugated Goat Anti-Rabbit Antibody at 1:40,000 for 30 min at RT. Block: MB-070 for 30 min at RT. Predicted/Observed size: 42 kDa, 42 kDa.

References

- Ramos B et al. MAVS oligomerization drives a faster and more efficient antiviral signaling activation at peroxisomes compared to mitochondria. *FEBS J.* (2026)
- Mukinovic E et al. Overcoming acquired doxorubicin resistance of ovarian carcinoma cells by verapamil-mediated promotion of DNA damage-driven cytotoxicity. *Int J Oncol.* (2026)
- Chia JC et al. CITF1 interacts with FIT and regulates copper-iron crosstalk in Arabidopsis. *Plant Cell.* (2026)
- Lin Z et al. Temporal photoproximity labeling of ligand-activated EGFR neighborhoods using MultiMap. *Nat Chem Biol.* (2026)
- Mohsen JJ et al. The GndA Microprotein Promotes Cell Growth during Heat Shock in Escherichia coli. *Biochemistry.* (2026)
- Murugan S et al. Pak1 dysregulates pyruvate metabolism in PDAC cells by exerting a phosphorylation-mediated regulatory effect on PDHA1. *J Biol Chem.* (2025)
- Li M et al. Escin Rescues Blood-brain Barrier and Inhibits NLRP3 Inflammasome-mediated Pyroptosis in Rats with Superior Sagital Sinus Thrombosis. *Int J Med Sci.* (2025)
- Fukuoka S et al. Mechanoreceptor Piezo1 channel-mediated interleukin expression in conjunctival epithelial cells: Linking mechanical stress to ocular inflammation. *Ocul Surf.* (2025)
- Schroder A et al. The Mechanosensitive PIEZO1 Channel Contributes to the Reaction of RAW264.7 Macrophages to Mechanical Strain. *Mediators Inflamm.* (2025)
- Knapp CP et al. Sex-dependent perturbations in risky choice behavior and prefrontal tyrosine hydroxylase levels induced by repetitive mild traumatic brain injury. *Behav Brain Res.* (2025)
- Zhong H et al. The zinc finger motif in the mitochondrial large ribosomal subunit protein bL36m is essential for optimal yeast mitoribosome assembly and function. *Biochim Biophys Acta Mol Cell Res.* (2024)
- Chuliinbat O et al. Electroacupuncture Inhibits Cartilage Degeneration in a Rat Knee Osteoarthritis (KOA) Model by Suppressing ADAMTS5 Expression. *Cureus.* (2024)
- van Soest DMK et al. Mitochondrial H2O2 release does not directly cause damage to chromosomal DNA. *Nat Commun.* (2024)
- Sang Y et al. PI4KIIIβ-Mediated Phosphoinositides Metabolism Regulates Function of the VTA Dopaminergic Neurons and Depression-Like Behavior. *J Neurosci.* (2024)
- Batorski MJ et al. Alterations in the immunolocalization of non-collagenous proteins in cartilage and bone tissue after gastrectomy, antrectomy, and fundectomy in a rat model. *Veterinary Medicine.* (2024)
- Park SH et al. Ellagic acid, a functional food component, ameliorates functionality of reverse cholesterol transport in murine model of atherosclerosis. *Nutr Res Pract.* (2024)
- Traczyk G et al. Diacylglycerol kinase-ε is S-palmitoylated on cysteine in the cytoplasmic end of its N-terminal transmembrane fragment. *J Lipid Res.* (2024)

- Kücük P et al. Cardiomyocytes, cardiac endothelial cells and fibroblasts contribute to anthracycline-induced cardiac injury through RAS-homologous small GTPases RAC1 and CDC42. *Pharmacol Res.* (2024)
- Guo T et al. Bacillus subtilis YisK possesses oxaloacetate decarboxylase activity and exhibits Mbl-dependent localization. *J Bacteriol.* (2024)
- Mochizuki M et al. Suppressive Activity of Boiogito, a Japanese Traditional Kampo Medicine, on Periostin Secretion in Human Fibroblast-Like Synoviocytes In Vitro. *Cureus.* (2024)
- Lin Z et al. Multiscale photocatalytic proximity labeling reveals cell surface neighbors on and between cells. *Science.* (2024)
- He QB et al. Functional assessment of a novel biallelic MYH3 variation causing CPSKF1B (contractures, pterygia, and spondylocarpotarsal fusion syndrome1B). *Mol Genet Genomic Med.* (2024)
- Küchler EC et al. Effect of genetic polymorphisms rs2301113 and rs2057482 in the expression of HIF-1α protein in periodontal ligament fibroblasts subjected to compressive force. *JAppl Oral Sci.* (2023)
- Arczewska-Włosek A et al. Effects of Anticoccidial Vaccination and Taraxacum officinale Extract on the Growth Performance, Biochemical Parameters, Immunity, and Intestinal Morphology of Eimeria-Challenged Chickens. *Life (Basel).* (2023)
- Bunduc CM et al. Reconstitution of a minimal ESX-5 type VII secretion system suggests a role for PPE proteins in the outer membrane transport of proteins. *mSphere.* (2023)
- Park SM et al. Dual IKZF2 and CK1α degrader targets acute myeloid leukemia cells. *Cancer Cell.* (2023)
- Castro JJ et al. DHA Supplementation during Pregnancy in Women with Obesity Normalizes IGF2R Levels in the Placenta of Male Newborns. *Int J Endocrinol.* (2023)
- Chen Y et al. Unannotated microprotein EMBOW regulates the interactome and chromatin and mitotic functions of WDR5. *Cell Rep.* (2023)
- Liu M et al. Co-culture models of endothelial cells, macrophages, and vascular smooth muscle cells for the study of the natural history of atherosclerosis. *PLoS One.* (2023)
- Bina P et al. Neurogenin 2 and Neuronal Differentiation 1 Control Proper Development of the Chick Trigeminal Ganglion and Its Nerve Branches. *J Dev Biol.* (2023)
- Dai X et al. Massively parallel knock-in engineering of human T cells. *Nat Biotechnol.* (2023)
- O'Neill KM et al. Time-dependent homeostatic mechanisms underlie brain-derived neurotrophic factor action on neural circuitry. *Commun Biol.* (2023)
- Barker SJ et al. Targeting Transferrin Receptor to Transport Antisense Oligonucleotides Across the Blood-Brain Barrier. *Sci Transl Med.* (2023)
- González MF et al. Extracellular vesicles from gastric epithelial GES-1 cells infected with Helicobacter pylori promote changes in recipient cells associated with malignancy. *Front Oncol.* (2022)
- Rajib Ahmed et al. Large-Scale Functionalized Metasurface-Based SARS-CoV-2 Detection and Quantification. *ACS Nano,* (2022)
- Cao X et al. Nascent alt-protein chemoproteomics reveals a pre-60S assembly checkpoint inhibitor. *Nat Chem Biol.* (2022)

- Na Z et al. Mapping subcellular localizations of unannotated microproteins and alternative proteins with MicroID. *Mol Cell.* (2022)
- Lim JH et al. Palmitoyl□RGD promotes the expression of dermal□epidermal junction components in HaCaT cells. *Mol Med Rep.* (2022)
- Mohan N et al. Effects of hypoxia on antigen presentation and T cell-based immune recognition of HPV16-transformed cells. *Front Immunol.* (2022)
- Paddenberg E et al. Impact of Melatonin on RAW264. 7 Macrophages during Mechanical Strain. *Int J Mol Sci.* (2022)
- Schroder A et al. Impact of phosphorylation of heat shock protein 27 on the expression profile of periodontal ligament fibroblasts during mechanical strain. *J Orofac Orthop.* (2022)
- Paddenberg E et al. Impact of Leptin on the Expression Profile of Macrophages during Mechanical Strain In Vitro. *Int J Mol Sci.* (2022)
- Antonio Abad-Fuentes et al. Alternative Hapten Design for Zearalenone Immunoreagent Generation. *Toxins (Basel).* (2022)
- Haimi CA et al. Neural crest cell-placodal neuron interactions are mediated by Cadherin-7 and N-cadherin during early chick trigeminal ganglion assembly. *F1000Res.* (2022)
- Schröder A et al. Impact of melatonin on periodontal ligament fibroblasts during mechanical strain. *Eur J Orthod.* (2022)
- Schenke M et al. Human-Relevant Sensitivity of iPSC-Derived Human Motor Neurons to BoNT/A1 and B1. *Toxins (Basel).* (2021)
- Donaldson J et al. Modern Hybrid Rye, as an Alternative Energy Source for Broiler Chickens, Improves the Absorption Surface of the Small Intestine Depending on the Intestinal Part and Xylanase Supplementation. *Animals (Basel).* (2021)
- Ramirez DH et al. Truncation of the TPR domain of OGT alters substrate and glycosite selection. *Anal Bioanal Chem.* (2021)
- Haje MI et al. The effect of cellular and physiological indicators on gender determination. *Cell Mol Biol (Noisy-le-grand).* (2021)
- Schroder A et al. Effects of mechanical strain on periodontal ligament fibroblasts in presence of Aggregatibacter actinomycetemcomitans lysate. *BMC Oral Health.* (2021)
- Takahashi H et al. Analgesic effect of voluntary exercise in a rat model of persistent pain via suppression of microglial activation in the spinal cord. *Biomed Res.* (2021)
- Ebihara N et al. Analgesic Effect of Combined Therapy with the Japanese Herbal Medicine “Yokukansan” and Electroacupuncture in Rats with Acute Inflammatory Pain. *Medicines (Basel).* (2021)
- Steger M et al. Time-resolved in vivo ubiquitinome profiling by DIA-MS reveals USP7 targets on a proteome-wide scale. *Nat Commun.* (2021)
- Schroder A et al. Impact of Leptin on Periodontal Ligament Fibroblasts during Mechanical Strain. *Int J Mol Sci.* (2021)
- Schroder A et al. Impact of salt and the osmoprotective transcription factor NFAT-5 on macrophages during mechanical strain. *Immunol Cell Biol.* (2021)
- Schroder A et al. Dietary Salt Accelerates Orthodontic Tooth Movement by Increased Osteoclast Activity. *Int J Mol Sci.* (2021)

- Puzio I et al. Alterations in Small Intestine and Liver Morphology, Immunolocalization of Leptin, Ghrelin and Nesfatin-1 as Well as Immunoexpression of Tight Junction Proteins in Intestinal Mucosa after Gastrectomy in Rat Model. *J Clin Med.* (2021)
- Schottelndreier D et al. Low Density Lipoprotein Receptor-Related Protein-1 (LRP1) Is Involved in the Uptake of Clostridioides difficile Toxin A and Serves as an Internalizing Receptor. *Front Cell Infect Microbiol.* (2020)
- Kirschneck C et al. Role and Regulation of Mechanotransductive HIF-1α Stabilisation in Periodontal Ligament Fibroblasts. *Int J Mol Sci.* (2020)
- Jiang C et al. Regulation of Mitochondrial Respiratory Chain Complex Levels, Organization, and Function by Arginyltransferase 1. *Front Cell Dev Biol* (2020)
- Timon-Gomez A et al. Distinct roles of mitochondrial HIGD1A and HIGD2A in respiratory complex and supercomplex biogenesis. *Cell Rep.* (2020)
- Timon-Gomez A et al. Protocol for the Analysis of Yeast and Human Mitochondrial Respiratory Chain Complexes and Supercomplexes by Blue Native Electrophoresis. *STAR Protoc.* (2020)
- Latif MB et al. Relative contributions of the cGAS-STING and TLR3 signaling pathways to attenuation of herpes simplex virus 1 replication. *J Virol.* (2020)
- Sundaramurthy S. et al. FHOD-1 is the only formin in Caenorhabditis elegans that promotes striated muscle growth and Z-line organization in a cell autonomous manner. *Cytoskeleton (Hoboken).* (2020)
- Groeger M et al. Effects of histamine on human periodontal ligament fibroblasts under simulated orthodontic pressure. *PLoS One.* (2020)
- Schroder A et al. Role of Oxygen Supply in Macrophages in a Model of Simulated Orthodontic Tooth Movement. *Mediators Inflamm.* (2020)
- Tomaszewska E, Dobrowolski P, Świątkiewicz M, Donaldson J, Puzio I, Muszyński S. Is Dietary 2-Oxoglutaric Acid Effective in Accelerating Bone Growth and Development in Experimentally-Induced Intrauterine Growth Retarded Gilts? *Animals (Basel).* (2020)
- Ramirez DH, Aonbangkhen C, Wu HY, et al. Engineering a Proximity-Directed O-GlcNAc Transferase for Selective Protein O-GlcNAcylation in Cells. *ACS Chem Biol.* (2020)
- Bastos AEP, Costa PF, Varderidou-Minasian S, Altelaar M, Lima PA. Feeding cycle alters the biophysics and molecular expression of voltage-gated Na+ currents in rat hippocampal CA1 neurones. *Eur J Neurosci.* (2019)
- Wang XX, Zhang H, Li Y. Preliminary study on the role of miR□148a and DNMT1 in the pathogenesis of acute myeloid leukemia. *Mol Med Rep.* (2019)
- Henninger C, Pohlmann S, Ziegler V, Ohlig J, Schmitt J, Fritz G. Distinct contribution of Rac1 expression in cardiomyocytes to anthracycline-induced cardiac injury. *Biochem Pharmacol.* (2019)
- Sanderson SM, Mikhael PG, Ramesh V, Dai Z, Locasale JW. Nutrient availability shapes methionine metabolism in p16/MTAP-deleted cells. *Sci Adv.* (2019)
- Lin N, Dong XJ, Wang TY, et al. Characteristics of olfactory ensheathing cells and microarray analysis in Tupaia belangeri (Wagner, 1841). *Mol Med Rep.* (2019)
- Flaxman HA, Miyamoto DK, Woo CM. Small Molecule Interactome Mapping by Photo-Affinity Labeling (SIM-PAL) to Identify Binding Sites of Small Molecules on a Proteome-Wide Scale. *Curr Protoc Chem Biol.* (2019)

- Schröder A, Neubert P, Titze J, et al. Osteoprotective action of low-salt diet requires myeloid cell-derived NFAT5. *JCI Insight.* (2019)
- Genth et al. Difference in Mono-O-Glucosylation of Ras Subtype GTPases Between Toxin A and Toxin B From Clostridioides difficile Strain 10463 and Lethal Toxin From Clostridium sordellii Strain 6018. *Frontiers in Microbiology* (2019)
- Schöttelndreier et al. Expression and (Lacking) Internalization of the Cell Surface Receptors of Clostridioides difficile Toxin B. *Frontiers in Microbiology* (2018)
- Song et al. Adeno-associated virus serotype 9 mediated vascular endothelial growth factor gene overexpression in mdx mice. *Experimental and Therapeutic Medicine* (2018)
- Atta et al. Thymoquinone Attenuates Cardiomyopathy in Streptozotocin-Treated Diabetic Rats. *Oxidative Medicine and Cellular Longevity* (2018)
- Adachi N, Suzuki S, Matsuoka H, et al. Corticotropin-releasing hormone-binding protein is up-regulated by brain-derived neurotrophic factor and is secreted in an activity-dependent manner in rat cerebral cortical neurons. *J Neurochem.* (2018)
- Paredes-Amaya CC, Valdés-García G, Juárez-González VR, Rudiño-Piñera E, Bustamante VH. The Hcp-like protein HilE inhibits homodimerization and DNA binding of the virulence-associated transcriptional regulator HilD in Salmonella. *J Biol Chem.* (2018)
- Lobo-Jarne T, Nývltová E, Pérez-Pérez R, et al. Human COX7A2L Regulates Complex III Biogenesis and Promotes Supercomplex Organization Remodeling without Affecting Mitochondrial Bioenergetics. *Cell Rep.* (2018)
- Rahman MT, Ghosh C, Hossain M, et al. IFN-γ, IL-17A, or zonulin rapidly increase the permeability of the blood-brain and small intestinal epithelial barriers: Relevance for neuro-inflammatory diseases. *Biochem Biophys Res Commun.* (2018)
- Simhadri VL, Hamasaki-Katagiri N, Lin BC, et al. Single synonymous mutation in factor IX alters protein properties and underlies haemophilia B. *J Med Genet.* (2017)
- González-Stegmaier R, Villarroel-Espíndola F, Manríquez R, et al. New immunomodulatory role of neuropeptide Y (NPY) in Salmo salar leucocytes. *Dev Comp Immunol.* (2017)
- Liu Y, Wang C, Shan X, et al. S100P is associated with proliferation and migration in nasopharyngeal carcinoma. *Oncol Lett.* (2017)
- Castaño et al. Folate Transporters in Placentas from Preterm Newborns and Their Relation to Cord Blood Folate and Vitamin B12 Levels. *PLOS One* (2017)
- Phan et al. Identification of a substrate domain that determines system specificity in mycobacterial type VII secretion systems. *Scientific Reports* (2017)
- Sullivan et al. TARP γ-2 Is Required for Inflammation-Associated AMPA Receptor Plasticity within Lamina II of the Spinal Cord Dorsal Horn. *The Journal of Neuroscience* (2017)
- Liang et al. Increased bone morphogenetic protein-6 in follicular fluid and granulosa cells may correlate with fertilization and embryo quality in humans. *Experimental and Therapeutic Medicine* (2017)
- Rohrbeck et al. The Rho ADP-ribosylating C3 exoenzyme binds cells via an Arg-Gly-Asp motif. *Journal of Biological Chemistry* (2017)

- Liberti et al. A Predictive Model for Selective Targeting of the Warburg Effect through GAPDH Inhibition with a Natural Product. *Cell Metabolism* (2017)
- Jeong YK et al. Docosahexaenoic acid inhibits cerulein-induced acute pancreatitis in rats. *Nutrients.* (2017)
- Jong WS et al. Application of an E. coli signal sequence as a versatile inclusion body tag. *Microbial Cell Factories* (2017)
- Wei et al. Interleukin-17 potently increases non-small cell lung cancer growth. *Molecular Medicine Reports* (2016)
- Zhao et al. Paris Saponins enhance radiosensitivity in a gefitinib-resistant lung adenocarcinoma cell line by inducing apoptosis and G2/M cell cycle phase arrest. *Molecular Medicine Reports* (2016)
- Yao et al. Elevated expression of chemokine C-C ligand 2 in stroma is associated with recurrent basal-like breast cancers. *Modern Pathology* (2016)
- Schelle et al. Role of p38alpha/beta MAP Kinase in Cell Susceptibility to Clostridium sordellii Lethal Toxin and Clostridium difficile Toxin B. *Toxins* (2016)
- Mendez et al. Endoplasmic reticulum stress-independent activation of unfolded protein response kinases by a small molecule ATP-mimic. *Elife* (2015)
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