

Datasheet for 618-103-012**Ferret IgG (gamma chain) Antibody Peroxidase Conjugated****Overview**

Description:	Goat Anti-Ferret IgG (gamma chain) Antibody Peroxidase Conjugated - 618-103-012
Item No.:	618-103-012
Size:	1 mg
Applications:	ELISA
Reactivity:	Ferret
Host Species:	Goat

Product Details

Background:	Anti-Ferret IgG Peroxidase Antibody generated in goat detects ferret 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.
Synonyms:	goat anti-Ferret IgG (gamma chain) Antibody peroxidase Conjugation, goat anti-Ferret IgG gamma HRP Conjugated Antibody
Host Species:	Goat
Specificity:	IgG (gamma chain)
Conjugate:	Peroxidase (HRP)
Clonality:	Polyclonal
Format:	IgG

Target Details

Reactivity:	Ferret
Immunogen Type:	Native Protein

Immunogen:	Anti-Ferret IgG (gamma chain) was produced by repeated immunization with ferret IgG gamma heavy chain in goat.
Purity/Specificity:	This product was prepared from monospecific antiserum by immunoaffinity chromatography using Ferret 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, Ferret IgG and Ferret Serum. Specificity was confirmed by ELISA at less than 1% cross reactivity against other Ferret heavy or light chain isotypes.

Application Details

Suggested Applications:	ELISA (Based on references)
Application Note:	Antibody Anti-Ferret IgG (gamma chain) peroxidase conjugated 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:	1:10,000 - 1:50,000
IHC:	1:500 - 1:2,500
WB:	1:1,000 - 1:5,000

Formulation

Physical State:	Lyophilized
Concentration:	1.0 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) Thimerosal
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
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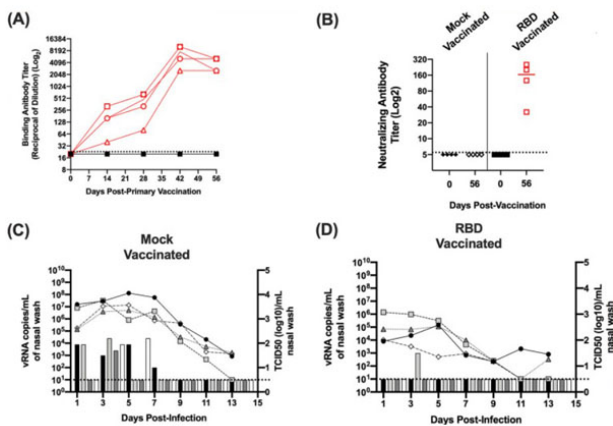
Storage Condition:

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

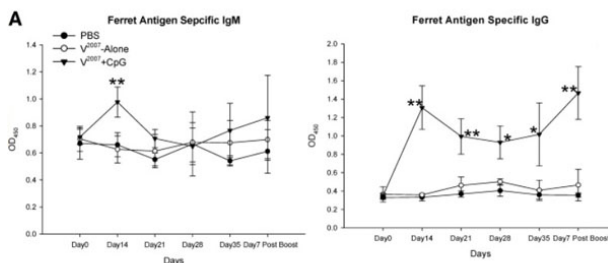
ELISA results using Goat Anti-Ferret IgG Antibody Peroxidase Conjugated.

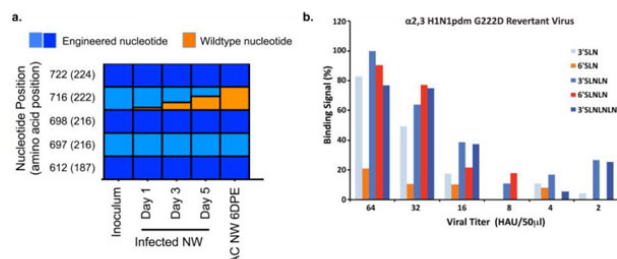
Antibody and viral titers in SARS-CoV-2-infected mock- and RBD-vaccinated ferrets. (A) Displays binding antibody titers against the S protein RBD determined by ELISA on days 0, 14, 28, 42, and 56 postprimary vaccination. Red open symbols represent RBD-vaccinated ferrets. Closed black symbols represent mock-vaccinated animals. Animals were given a secondary vaccination on day 28. (B) Displays neutralizing antibody titers on day 56. (C and D) Display nasal wash titers in mock- and RBD-vaccinated animals challenged with SARS-CoV-2, respectively. Line graphs indicate levels of vRNA determined via N2 gene qRT-PCR (left y axis), and bar graphs indicate infectious titers (right y axis) determined via TCID50 on Vero cells. Horizontal dashed lines indicate limit of detection. Fig3. PMID: 33827954.

ELISA

ELISA results using Goat Anti-Ferret IgG Antibody Peroxidase Conjugated.

CpG ODN-assisted vaccination increased influenza virus-specific antibody levels in serum from immunized ferrets. Influenza virus-specific antibody levels in serum from immunized ferrets were assessed by ELISA (A). (A) Serum IgM (left) and IgG (right) antibody levels against the commercial vaccine Fluviral were measured at days 0, 14, 21, 28, and 35 and day 7 postboost. The average relative absorbance densities read at 450 nm from three individual samples were plotted graphically. FIG. 1. PMID: 20534862.





ELISA

ELISA results using Goat Anti-Ferret IgG Antibody Peroxidase Conjugated.

Characterization of transmissible α 2,3 H1N1pdm viruses. Deep sequencing of the α 2,3 H1N1pdm inoculum, nasal wash (NW) from an infected ferret on 1, 3, and 5 DPI, and NW from one AC animal on 6 days post-exposure (DPE), representative of the 3 AC animals, revealed a reversion at residue 222 from G to D (a). Graphical representation of the proportion of reads at each engineered nucleotide is shown. Blue shading represents the α 2,3 engineered nucleotide and orange represent the WT nucleotide residue. All other engineered nucleotides were maintained. A G222D reversion, in the context of the other engineered mutations, affects the glycan specificity of the α 2,3 H1N1pdm virus (b). The glycans are indicated in the figure legend, orange colors represent α 2,6SA and blue colors represent α 2,3SA. H1 numbering is used for all amino acid positions. Fig. 2. PMID: 26416728.

References

- Patel DR et al. Transmission and protection against re-infection in the ferret model with the SARS-CoV-2 USA-WA1/2020 reference isolate. *J Virol.* (2021)
- Lakdawala SS, Jayaraman A, Halpin RA, et al. The soft palate is an important site of adaptation for transmissible influenza viruses. *Nature.* (2015)
- Fang Y et al. Molecular characterization of in vivo adjuvant activity in ferrets vaccinated against influenza virus. *J Virol.* (2010)

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.