

Datasheet for 604-1103**Dog IgG Fc Antibody****Overview**

Description:	Goat Anti-Dog IgG Fc Antibody - 604-1103
Item No.:	604-1103
Size:	2 mg
Applications:	Dot Blot, ELISA, IHC
Reactivity:	Dog
Host Species:	Goat

Product Details

Background:	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. 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. Anti-Dog IgG F(c) antibody is ideal for investigators in Immunology, Cancer, and Microbiology research.
Synonyms:	goat anti Dog IgG F(c) Antibody, goat anti Dog IgG Fc Antibody
Host Species:	Goat
Specificity:	IgG Fc
Clonality:	Polyclonal
Format:	IgG

Target Details

Reactivity:	Dog
Immunogen:	Dog IgG F(c) fragment

Purity/Specificity: This product was prepared from monospecific antiserum by immunoaffinity chromatography using Dog 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-Goat Serum, Dog IgG, Dog IgG F(c) and Dog Serum. No reaction was observed against Dog IgG F(ab).

Application Details

Tested Applications: Dot Blot, ELISA

Suggested Applications: IHC (Based on references)

Application Note: Anti-Dog IgG F(c) antibody has been tested by ELISA and dot blot and is suitable for ELISA, western blot, and immunohistochemistry, as well as other 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: 1:20,000 - 1:100,000

IHC: 1:1,000 - 1:5,000

WB: 1:2,000 - 1:10,000

Formulation

Physical State: Liquid (sterile filtered)

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) Sodium Azide

Stabilizer: None

Shipping & Handling

Shipping Condition: Wet Ice

Storage Condition: Store vial at 4° C prior to opening. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing.

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

Images

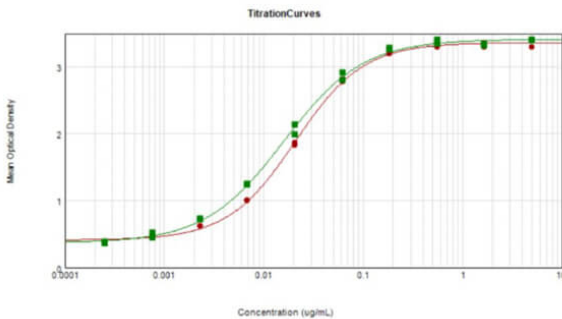


Immunohistochemistry

Paraffin wax-embedded and hematoxylin-stained sections were used to confirm the absence of pathological changes by light microscopy. For immunohistochemistry, 3–4 μm sections were placed on coated slides and dried to enhance tissue adherence. Antigen retrieval was performed on deparaffinized and rehydrated sections by heating in citrate buffer (pH 6). Primary antibody: Anti-Dog IgG F(c) goat antibody 604-1103 (dilution 1:30 000), Negative control: Dog IgG F(c) fragment 004-0103 (dilution 1:30 000).

Immunohistochemically stained canine cornea. The signal intensity scores were epithelium: 0 with superficial artifact: 2, stroma: 2, and DM: 0. The endothelium was detached and could not be assessed in this specimen. Fig 5.

PMID: 35239261.



ELISA

ELISA Results of Purified Goat Anti-Dog IgG F(c) Antibody tested against purified Dog IgG F(c). Each well was coated in duplicate with 10 μg of Dog IgG F(c) (p/n 004-0103) [Red Line] and Dog IgG (p/n 004-0102) [Green Line]. The working dilution of Dog IgG F(c) is 1:48,000. The starting dilution of antibody was 5 $\mu\text{g}/\text{ml}$ and the X-axis represents the Log₁₀ of a 3-fold dilution. This titration is a 4-parameter curve fit where the IC₅₀ is defined as the titer of the antibody. Assay performed using 3% Fish Gel/PBS Blocking buffer (p/n MB-066), Donkey Anti-Goat IgG mx8 HRP conjugated and TMB substrate (p/n TMBE-1000).

References

- Herb VM et al. Immunohistochemical staining of immunoglobulin G in healthy equine, canine, and feline corneas. *Vet Ophthalmol.* (2022)

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.