



# SZABO SCANDIC

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## Produktinformation



Forschungsprodukte & Biochemikalien



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Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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**Datasheet for 004-0102****Dog IgG****Overview**

<b>Description:</b>	Dog IgG Whole Molecule (BULK ORDER) - 004-0102
<b>Item No.:</b>	004-0102
<b>Size:</b>	10 mg
<b>Applications:</b>	SDS-PAGE, Biochemical Assay, ELISA, Functional Assay
<b>Origin:</b>	Dog

**Product Details**

<b>Background:</b>	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.
<b>Synonyms:</b>	Dog immunoglobulin G, Canine IgG
<b>Species of Origin:</b>	Dog
<b>Format:</b>	IgG
<b>Type:</b>	Native Protein

**Target Details**

<b>Purity/Specificity:</b>	Dog IgG whole molecule was prepared from normal serum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. Dog IgG whole molecule was assayed by immunoelectrophoresis resulted in a single precipitin arc against anti-Dog IgG and anti-Dog Serum.
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**Application Details**

<b>Tested Applications:</b>	SDS-PAGE
<b>Suggested Applications:</b>	Biochemical Assay, ELISA, Functional Assay (Based on references)
<b>Application Note:</b>	Dog IgG whole molecule has been tested in SDS-Page and can be utilized as a control or standard reagent in Western Blotting and ELISA experiments.
<b>Assay Dilutions:</b>	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
<b>ELISA:</b>	User Optimized
<b>IHC:</b>	User Optimized
<b>WB:</b>	User Optimized

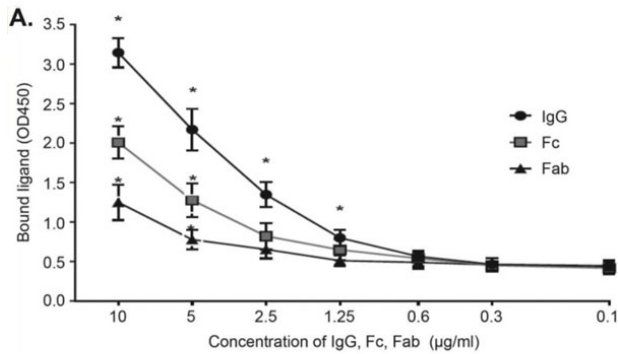
## Formulation

<b>Physical State:</b>	Lyophilized
<b>Concentration:</b>	10.0 mg/mL by UV absorbance at 280 nm
<b>Buffer:</b>	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
<b>Preservative:</b>	0.01% (w/v) Sodium Azide
<b>Reconstitution Volume:</b>	1.0 mL
<b>Reconstitution Buffer:</b>	Restore with deionized water (or equivalent)

## Shipping & Handling

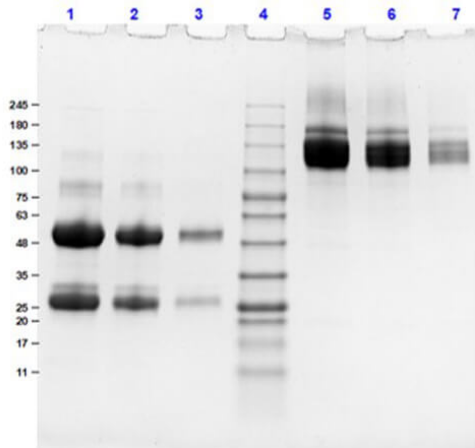
<b>Shipping Condition:</b>	Ambient
<b>Storage Condition:</b>	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. Dog IgG whole molecule is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
<b>Expiration:</b>	Expiration date is one (1) year from date of receipt.

## Images



#### ELISA

Full-length coagulase protein binding to prothrombin, canine IgG, and complement C3. Data were obtained from three independent experiments. (A) ELISA results showing coagulase binding of canine IgG, Fc, and Fab. There was a significant interaction of treatment (IgG, Fc, and Fab) with the binding of coagulase protein ( $P = 0.010$ ). All three treatments had significant differences between results at different concentrations ( $P < 0.001$ ). For IgG concentrations of 10, 5, 2.5, and 1.25  $\mu\text{g/ml}$ , binding was significantly different from that of the negative control (\*,  $P < 0.001$ ). For Fc and Fab concentrations of 5 and 10  $\mu\text{g/ml}$ , binding was significantly different from that of the negative control (\*,  $P < 0.001$ ). The coagulase protein bound more IgG and Fc than Fab. At 5 and 10  $\mu\text{g/ml}$ , IgG binding was significantly higher than that of Fab ( $P = 0.008$ ), and binding of IgG and Fc was marginally different ( $P = 0.054$ ). Fig 4. PMID: 29891539.



#### SDS-PAGE

SDS-PAGE of Dog IgG Whole Molecule. Lane 1: Dog IgG Whole Molecule Reduced (10 $\mu\text{g}$ ). Lane 2: Dog IgG Whole Molecule Reduced (5 $\mu\text{g}$ ). Lane 3: Dog IgG Whole Molecule Reduced (1.0 $\mu\text{g}$ ). Lane 4: Opal Prestained Molecular Weight Marker (p/n MB-210-0500). Lane 5: Dog IgG Whole Molecule Non-Reduced (10 $\mu\text{g}$ ). Lane 6: Dog IgG Whole Molecule Non-Reduced (5 $\mu\text{g}$ ). Lane 7: Dog IgG Whole Molecule Non-Reduced (1.0 $\mu\text{g}$ ). 4-20% Gel, Coomassie Stained.

## References

- Sewid AH et al. Identification, Cloning, and Characterization of Staphylococcus pseudintermedius Coagulase. *Infect Immun.* (2018)
- Abouelkhair, MA et al. Characterization of recombinant wild-type and nontoxic protein A from Staphylococcus pseudintermedius. *Virulence* (2018)

## 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.