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#### Datasheet for 005-0102

# **Goat IgG**

## **Overview**

Description:	Goat IgG Whole Molecule (BULK ORDER) - 005-0102
Item No.:	005-0102
Size:	25 mg
Applications:	SDS-PAGE, Other
Origin:	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.
	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.

Goat immunoglobulin G

Goat

IgG

# **Target Details**

**Species of Origin:** 

Synonyms:

Format:

Type:

**Purity/Specificity:** Goat IgG whole molecule was prepared from normal serum by a multi-step process which

**Native Protein** 

includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. Goat IgG whole molecule assayed by immunoelectrophoresis resulted in a single precipitin arc against anti-Goat IgG and anti-Goat Serum.

**Application Details** 

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Tested Applications:	SDS-PAGE
Suggested Applications:	Other (Based on references)
Application Note:	Goat 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.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	User Optimized
IHC:	User Optimized
WB:	User Optimized

# **Formulation**

Physical State:	Lyophilized
Concentration:	10.0 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
Reconstitution Volume:	2.5 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

# **Shipping & Handling**

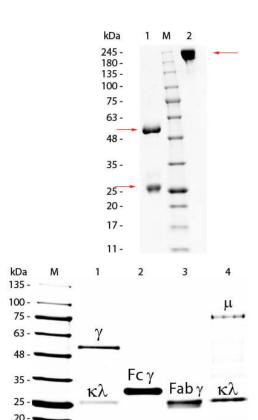
Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. Goat IgG whole molecule is 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**

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#### **SDS-PAGE**

SDS-PAGE of Goat IgG Whole Molecule. Lane 1: Reduced Goat IgG Whole Molecule. Lane 2: 3  $\mu$ L OPAL Pre-stained Marker (p/n MB-210-0500). Lane 3: Non-reduced Goat IgG Whole Molecule. Load: 1  $\mu$ g per lane. Predicted/Observed size: Non-reduced at 160 kDa/observed at 180-200 kDa; Reduced at 55, 25 kDa. Non-reduced migrates at slightly higher molecular weight.

#### **SDS-PAGE**

SDS-PAGE of Goat IgG Whole Molecule Rhodamine Conjugated (p/n 005-0002). Lane M: 5  $\mu$ L Opal Prestained Marker (p/n MB-210-0500). Lane 1: Reduced Goat IgG Whole Molecule Rhodamine Conjugated (p/n 005-0002). Lane 2: Reduced Goat IgG F(c) Fragment (p/n 005-0103). Lane 3: Reduced Goat IgG F(ab) Fragment (p/n 005-0105). Lane 4: Reduced Goat IgM Whole Molecule (p/n 005-0107). Load: 1  $\mu$ g for IgG, F(c) and F(ab); 3  $\mu$ g for IgM. Predicted/Observed size: IgG at 50 and 25 kDa; F(c) at 25 kDa; F(ab) at 25 kDa; IgM at 70 and 23 kDa. Observed F(c) Fragment migrates slightly higher.

## References

• Yamada Y et al. Efficient and high-speed transduction of an antibody into living cells using a multifunctional nanocarrier system to control intracellular trafficking. *J Pharm Sci.* (2015)

### 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.

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