



# SZABO SCANDIC

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## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### Lieferung & Zahlungsart

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### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

**Datasheet for 012-0102-0005**

## Rat IgG

### Overview

<b>Description:</b>	Rat IgG Whole Molecule - 012-0102-0005
<b>Item No.:</b>	012-0102-0005
<b>Size:</b>	5 mg
<b>Applications:</b>	SDS-PAGE, WB, ELISA, FC, Other
<b>Origin:</b>	Rat

### Product Details

<b>Background:</b>	Rat IgG purified protein (Immunoglobulin G) are antibody molecules. Rat IgG is composed of four peptide chains — two heavy chains (gamma) and two light chains. Rat IgG has two antigen binding sites. Other Immunoglobulins may be described in terms of polymers with the IgG structure considered the monomer. Rat IgG typically constitutes 75% of serum immunoglobulins. Rat IgG molecules are synthesized and secreted by plasma B cells.
<b>Synonyms:</b>	Rat Immunoglobulin G, Rat IgG whole molecule, Rat IgG purified protein
<b>Species of Origin:</b>	Rat
<b>Format:</b>	IgG
<b>Type:</b>	Native Protein

### Target Details

<b>Purity/Specificity:</b>	Rat IgG 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. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Rat IgG and anti-Rat Serum.
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### Application Details

<b>Tested Applications:</b>	SDS-PAGE, WB
<b>Suggested Applications:</b>	ELISA, FC, Other (Based on references)

<b>Application Note:</b>	Rat IgG whole molecule has been tested by SDS-Page and Western Blot and is suitable for use as antigen or ligand in immunochemical reactions, as a control or standard in assays, for conjugation and most other immunological methods requiring highly purified immunoglobulins.
<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>FC:</b>	User Optimized
<b>WB:</b>	User Optimized

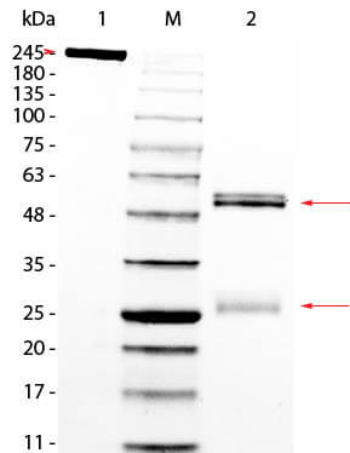
## Formulation

<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>Stabilizer:</b>	None
<b>Reconstitution Volume:</b>	500 µL
<b>Reconstitution Buffer:</b>	Restore with deionized water (or equivalent)

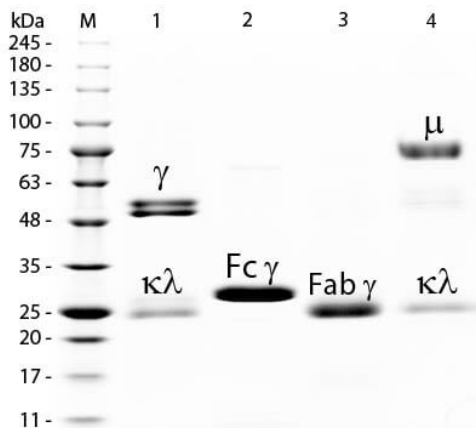
## Shipping & Handling

<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. This product 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


**SDS-PAGE**

SDS PAGE of Rat IgG Whole Molecule. Lane 1: Non-Reduced Rat IgG Whole Molecule. Lane 2: 5 µL Opal Prestained Marker (p/n MB-210-0500). Lane 3: Reduced Rat IgG Whole Molecule. Load: 1 µg per lane. Predicted/Observed size: Non-Reduced at 160kDa/Observed at 245 kDa; Reduced at 55, 25 kDa. Non-reduced IgG migrates slightly higher.


**SDS-PAGE**

SDS-PAGE of Rat IgG F(c) Fragment Rhodamine Conjugated (p/n 012-0003). Lane M: 3 µL Opal Prestained Marker (p/n MB-210-0500). Lane 1: Reduced Rat IgG Whole Molecule (p/n 012-0102). Lane 2: Reduced Rat IgG F(c) Fragment Rhodamine Conjugated (p/n 012-0003). Lane 3: Reduced Rat IgG Fab Fragment (p/n 012-0105). Lane 4: Reduced Rat IgM Whole Molecule (p/n 012-0107). Load: 1 µg of IgG, F(c), Fab; 1.5 µg of IgM. Predicted/Observed size: IgG at 55 and 25 kDa; F(c) at 25 kDa; Fab at 25 kDa; IgM at 78 and 25 kDa. Observed F(c) Fragment migrates slightly higher.

**References**

- Sundararaj KP. et al. "Neuraminidase activity mediates IL-6 production through TLR4 and p38/ERK MAPK signaling in MRL/lpr mesangial cells" *bioRxiv* (2020)
- Matsumura T et al. Sequential Sensing by TLR2 and Mincle Directs Immature Myeloid Cells to Protect against Invasive Group A Streptococcal Infection in Mice. *Cell Rep* (2019)
- Zhang Z et al. Elav-mediated exon skipping and alternative polyadenylation of the Dscam1 gene are required for axon outgrowth. *Cell Rep* (2019)
- Jean M Daley et al. Modulation of macrophage phenotype by soluble product(s) released from neutrophils. *J Immunol.* (2005)

**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.