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Datasheet for 011-0104

# Rabbit IgG F(ab')2

## Overview

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| **Description:** | Rabbit IgG F(ab')2 Fragment - 011-0104 |
| **Item No.:** | 011-0104 |
| **Size:** | 2 mg |
| **Applications:** | SDS-PAGE, Other |
| **Origin:** | Rabbit |

## Product Details

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| **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. This product possesses the F(ab')2 fragment, recognized by the two F(ab) fragments yielded from the digestion of the antibody below the disulfide bond hinge region. |
| **Synonyms:** | Rabbit Immunoglobulin IgG F(ab')2 fragment, IgG Fab2 |
| **Species of Origin:** | Rabbit |
| **Format:** | IgG F(ab')2 |
| **Type:** | Native Protein |

## Target Details

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| **Purity/Specificity:** | Rabbit IgG F(ab')2 was prepared from normal serum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by pepsin digestion and extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Rabbit IgG, anti-Rabbit IgG F(ab')2 and anti-Rabbit Serum. No reaction was observed against anti-Rabbit IgG F(c) or anti-Pepsin. |

## Application Details

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| **Tested Applications:** | SDS-PAGE |

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| **Suggested Applications:** | Other (Based on references) |
| **Application Note:** | Rabbit IgG F(ab')2 Fragment has been tested in SDS-Page and can be utilized as a control or standard reagent in SDS, 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 |
| **WB:** | User Optimized |

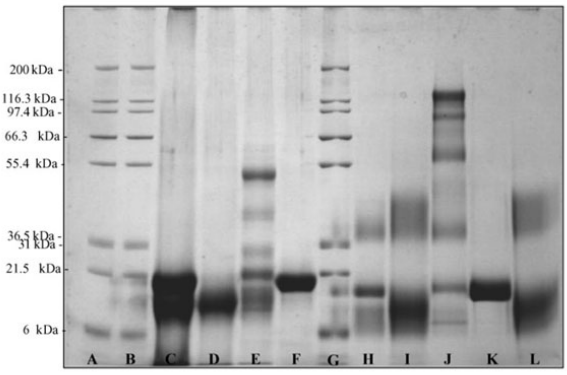
## Formulation

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| **Physical State:** | Lyophilized |
| **Concentration:** | 2.017 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:** | 1.0 mL |
| **Reconstitution Buffer:** | Restore with deionized water (or equivalent) |

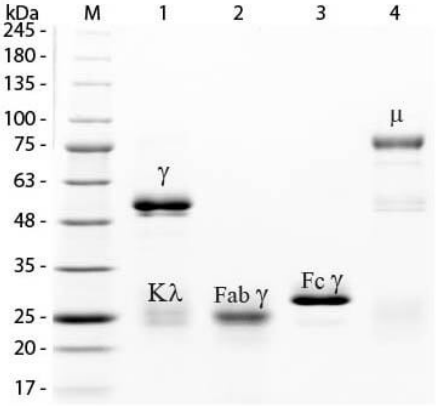
## Shipping & Handling

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| **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. 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




**SDS-PAGE**
SDS PAGE gel of commercially-purified rabbit Immunoglobulin G (rIgG) and of rIgG papain digestion products Fab and Fc. Lanes C–F contain products which have been reduced with b-mercaptoethanol. Lanes H–L contain non-reduced products. Each lane contains approximately 35 mg of the following products: Lanes C and H contain papain digested products; Lanes D, I and L contain Fc fragment obtained from protein A purification; Lanes E and J contain whole rIgG; Lanes F and K contain Fab fragment obtained from protein A purification; Lanes A, B and G contain gel markers. Whole rIgG (p/n 011-0102), rFc (p/n 011-0103), rFab (p/n 011-0105), rF(ab')2 (p/n 011-0104). Fig. 3. PMID: 12643976.




**SDS-PAGE**
SDS-PAGE of Rabbit IgG Whole Molecule Rhodamine Conjugated (p/n 011-0002). Lane M: 3 µL Opal Prestained Marker (p/n MB-210-0500). Lane 1: Reduced Rabbit IgG Whole Molecule Rhodamine Conjugated (p/n 011-0002). Lane 2: Reduced Rabbit IgG F(ab) Fragment (p/n 011-0105). Lane 3: Reduced Rabbit IgG F(c) Fragment (p/n 011-0103). Lane 4: Reduced Rabbit IgM Whole Molecule (p/n 011-0107). Load: 1 µg for F(ab) and F(c); 1.2 µg for IgG and 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

- Moore RW et al. Effect of bursal anti-steroidogenic peptide and immunoglobulin G on neonatal chicken B-lymphocyte proliferation. *Comp Biochem Physiol C Toxicol Pharmacol.* (2003)

## Disclaimer

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