

Datasheet for 610-1004**Mouse IgG F(ab')₂ Antibody Rhodamine Conjugated****Overview**

Description:	Goat Anti-Mouse IgG F(ab') ₂ Antibody Rhodamine Conjugated - 610-1004
Item No.:	610-1004
Size:	2 mg
Applications:	EM
Reactivity:	Mouse
Host Species:	Goat

Product Details

Background:	Anti-MOUSE IgG F(ab') ₂ Antibody Rhodamine Conjugated generated in goat recognizes the dimeric Fab portion of the mouse IgG molecule. MOUSE IgG F(ab') ₂ is a proteolytic fragment of immunoglobulin G (IgG) obtained by limited digestion with the enzyme pepsin under controlled conditions of temperature, time and pH. F(ab') ₂ molecules lack the Fc portion of IgG and therefore receptors that bind mouse IgG F(c) will not bind mouse IgG F(ab') ₂ molecules. 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-Mouse IgG F(ab') ₂ Antibody Rhodamine Conjugated is ideal for investigators involved in serum protein components.
Synonyms:	Goat Anti-Mouse IgG F(ab') ₂ rhodamine Conjugated Antibody, Goat Anti-Mouse IgG Fab2 rhodamine Conjugated Antibody, Goat Anti-Mouse IgG Fab2 Fragment Antibody rhodamine Conjugation
Host Species:	Goat
Specificity:	IgG F(ab') ₂
Conjugate:	Rhodamine (TRITC)
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	2.3

Target Details

Reactivity:	Mouse
Immunogen:	Mouse IgG F(ab') ₂ fragment
Purity/Specificity:	This product was prepared from monospecific antiserum by immunoaffinity chromatography using Mouse 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, Mouse IgG, Mouse IgG F(ab') ₂ and Mouse Serum. No reaction was observed against Mouse IgG F(c).

Application Details

Suggested Applications:	EM (Based on references)
Application Note:	This product is designed for immunofluorescence microscopy, fluorescence based plate assays (FLISA) and fluorescent western blotting. This product is also suitable for multiplex analysis, including multicolor imaging, utilizing various commercial platforms.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
FC:	1:500 - 1:2,500
FLISA:	1:10,000 - 1:50,000
IF:	1:1,000 - 1:5,000

Formulation

Physical State:	Lyophilized
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:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	1.0 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

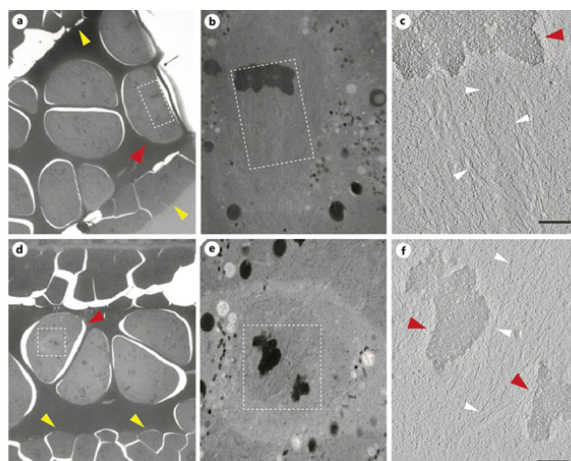
Shipping & Handling

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. 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



Immunofluorescence Microscopy

Z. mays meiotic spindle imaged using electron microscopy. a Low magnification view of a Z. mays anther containing several meiotic cells (half-moon shaped) contained within it. Red arrow indicates the meiotic cell further magnified in b, c (referred to as "Cell A"). The white dashed box indicates the region enlarged in b. Yellow arrows indicate tapetal cells that line the anther. b Low magnification overview of 300 nm section used for tilt series collection with visible half meiotic metaphase spindle. The white box indicates the region enlarged in c. Within the dashed box, one mass of darkly stained chromosomes is visible and a network of microtubules. c Tomographic slice displaying condensed meiotic chromosome masses (red arrow) and microtubules of the spindle (examples indicated with white arrows). d Low magnification view of a Z. mays anther with several meiotic cells (half-moon shaped) contained within it. Red arrow indicates the meiotic cell further magnified in b, c (referred to as "Cell B"). e Low magnification overview of 300 nm section used for tilt series collection with visible midzone of meiotic metaphase spindle. The white box indicates the region enlarged in c. Within the dashed box, two masses of darkly stained chromosomes are visible and a network of microtubules. f Tomographic slice displaying condensed meiotic chromosome masses (red arrows) and microtubules of the spindle (examples indicated with white arrows). Scale bars: 1 μ m. Fig 1. PMID: 40730029

References

- Myong S et al. Zea mays meiotic spindle ultrastructure reveals kinetochore-microtubule interface and embedded membrane components. *Cytogenet Genome Res.* (2025)

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.