

**Datasheet for 311-1204****F(ab')<sub>2</sub> Rabbit IgG F(ab')<sub>2</sub> Antibody Fluorescein Conjugated****Overview**

|                      |                                                                                                         |
|----------------------|---------------------------------------------------------------------------------------------------------|
| <b>Description:</b>  | Goat F(ab') <sub>2</sub> Anti-Rabbit IgG F(ab') <sub>2</sub> Antibody Fluorescein Conjugated - 311-1204 |
| <b>Item No.:</b>     | 311-1204                                                                                                |
| <b>Size:</b>         | 20 mg                                                                                                   |
| <b>Applications:</b> | EM                                                                                                      |
| <b>Reactivity:</b>   | Rabbit                                                                                                  |
| <b>Host Species:</b> | Goat                                                                                                    |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
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| <b>Background:</b>   | F(ab') <sub>2</sub> Anti-Rabbit IgG F(ab') <sub>2</sub> Fluorescein Antibody generated in goat detects Rabbit F(ab') <sub>2</sub> . Representing approximately 75% of serum immunoglobulins, IgG is the most abundant antibody isotype found in the circulation. IgG molecules are synthesized and secreted by plasma B cells. 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. F(ab') <sub>2</sub> Antibody is ideal for investigators who routinely perform flow cytometry, immunohistochemistry or IHC and other immunoassays. |
| <b>Synonyms:</b>     | goat F(ab') <sub>2</sub> Anti-RABBIT IgG F(ab') <sub>2</sub> fluorescein conjugated Antibody, goat F(ab') <sub>2</sub> Anti-RABBIT IgG Fab2 FITC conjugated Antibody, goat Fab2 Anti-Rabbit IgG Fab2 FITC conjugation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Host Species:</b> | Goat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Specificity:</b>  | IgG F(ab') <sub>2</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Conjugate:</b>    | Fluorescein (FITC)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Format:</b>       | IgG F(ab') <sub>2</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>F/P Ratio:</b>    | 3.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

**Target Details**

|                    |        |
|--------------------|--------|
| <b>Reactivity:</b> | Rabbit |
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|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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| <b>Immunogen:</b>          | Rabbit IgG F(ab') <sub>2</sub> fragment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Purity/Specificity:</b> | This product is a F(ab') <sub>2</sub> fragment of an IgG fraction antibody purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation, ion exchange chromatography and pepsin digestion followed by extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-fluorescein, anti-Goat Serum, Rabbit IgG, Rabbit IgG F(ab') <sub>2</sub> and Rabbit Serum. No reaction was observed against Rabbit IgG F(c), anti-Goat IgG F(c) or anti-Pepsin. |

## Application Details

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| <b>Suggested Applications:</b> | EM (Based on references)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Application Note:</b>       | F(ab') <sub>2</sub> Anti-Rabbit IgG F(ab') <sub>2</sub> Fluorescein Antibody 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. Suitable for immunomicroscopy and flow cytometry or FACS analysis as well as other antibody based fluorescent assays requiring extremely low background levels, absence of F(c) mediated binding, lot-to-lot consistency, high titer and specificity. |
| <b>Assay Dilutions:</b>        | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>FC:</b>                     | 1:500 - 1:2,500                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>FLISA:</b>                  | 1:10,000 - 1:50,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>IF:</b>                     | 1:1,000 - 1:5,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

## Formulation

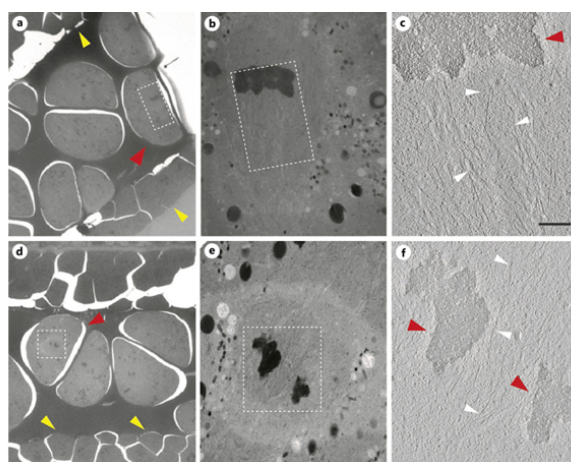
|                               |                                                                        |
|-------------------------------|------------------------------------------------------------------------|
| <b>Physical State:</b>        | Lyophilized                                                            |
| <b>Concentration:</b>         | 10.0 mg/mL by UV absorbance at 280 nm                                  |
| <b>Buffer:</b>                | 0.01 M Sodium Phosphate, 0.15 M Sodium Chloride, pH 7.2                |
| <b>Preservative:</b>          | 0.01% (w/v) Thimerosal                                                 |
| <b>Stabilizer:</b>            | 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free |
| <b>Reconstitution Volume:</b> | 2.0 mL                                                                 |
| <b>Reconstitution Buffer:</b> | Restore with deionized water (or equivalent)                           |

## Shipping & Handling

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|----------------------------|---------|
| <b>Shipping Condition:</b> | Ambient |
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|                           |                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <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



### 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 μm. 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.