

**Datasheet for 310-4102****F(ab')<sub>2</sub> Mouse IgG (H&L) Antibody****Overview**

|                      |                                                                     |
|----------------------|---------------------------------------------------------------------|
| <b>Description:</b>  | Rabbit F(ab') <sub>2</sub> Anti-Mouse IgG (H&L) Antibody - 310-4102 |
| <b>Item No.:</b>     | 310-4102                                                            |
| <b>Size:</b>         | 20 mg                                                               |
| <b>Applications:</b> | EM                                                                  |
| <b>Reactivity:</b>   | Mouse                                                               |
| <b>Host Species:</b> | Rabbit                                                              |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | F(ab') <sub>2</sub> Antibody was generated by enzymatic cleavage and subsequent separation from the Fc fragment. Because of their smaller size, F(ab') <sub>2</sub> fragments offer several advantages over intact antibodies for use in certain immunochemical techniques and experimental applications. F(ab') <sub>2</sub> fragments penetrate into tissue samples and show better antigen recognition and signal generation in IHC. F(ab') <sub>2</sub> fragments lack the Fc region and therefore do not bind Fc receptors which effectively lowers background staining. F(ab') <sub>2</sub> Antibody is ideal for investigators who routinely perform flow cytometry, immunohistochemistry or IHC and other immunoassays. |
| <b>Synonyms:</b>     | Rabbit F(ab') <sub>2</sub> Anti-MOUSE IgG Antibody, Rabbit Fab2 Anti Mouse IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Specificity:</b>  | IgG (H&L)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Format:</b>       | IgG F(ab') <sub>2</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

**Target Details**

|                    |                          |
|--------------------|--------------------------|
| <b>Reactivity:</b> | Mouse                    |
| <b>Immunogen:</b>  | Mouse IgG whole molecule |

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| <b>Purity/Specificity:</b> | This product is a F(ab') <sub>2</sub> fragment of 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 chromatographic separation and extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Rabbit Serum, Mouse IgG and Mouse Serum. No reaction was observed against anti-Rabbit IgG F(c) or anti-Pepsin. |
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## Application Details

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| <b>Suggested Applications:</b> | EM (Based on references)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Application Note:</b>       | 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. The maximum amount of reagent required to stain 1 x 10 <sup>6</sup> cells in flow cytometry is approximately 1.0 µg of antibody. Lesser amounts of reagent may be sufficient for staining. Optimal titers for other applications should be determined by the researcher. As a general guideline dilutions of 1:100 to 1:250 should be suitable for most applications. |
| <b>Assay Dilutions:</b>        | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>ELISA:</b>                  | 1:20,000 - 1:100,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>IHC:</b>                    | 1:1,000 - 1:5,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>WB:</b>                     | 1:2,000 - 1:10,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

## 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) Sodium Azide                                |
| <b>Stabilizer:</b>            | None                                                    |
| <b>Reconstitution Volume:</b> | 2.0 mL                                                  |
| <b>Reconstitution Buffer:</b> | Restore with deionized water (or equivalent)            |

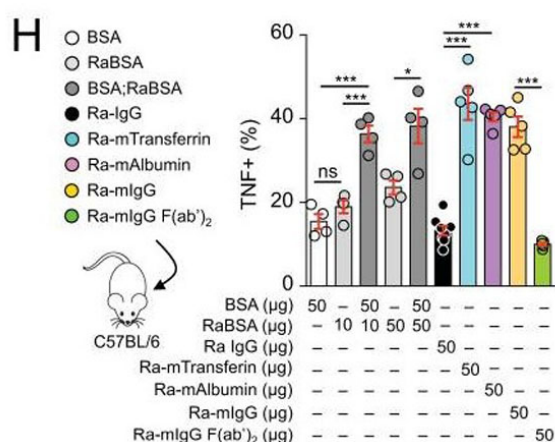
## Shipping & Handling

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



### Figure

FcγRIV-dependent uptake and activation of kidney, but not dermal, macrophages by small immune complexes, 'auto' antibodies, and NZWxBXSB serum. (H) TNF staining in kidney F4/80bright macrophages from wt mice 1 hour after i.v. injection of the indicated amounts of BSA, RaBSA, BSA;RaBSA, rabbit IgG (Ra-IgG), rabbit anti-mouse transferrin (Ra-mTransferrin) [p/n 600-401-255], rabbit anti-mouse albumin (Ra-mAlbumin) [p/n 600-401-254], rabbit anti-mouse IgG (Ra-mIgG) [p/n 610-4102] or Ra-mIgG (Fab')<sub>2</sub> [p/n 310-4102]. N= 4–5 mice per treatment. Fig 5. PMID: 27477514.

## References

- Stamatiades et al. Immune Monitoring of Trans-endothelial Transport by Kidney-Resident Macrophages. *Cell* (2016)

## 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.