

## Immunofluorescence (IF) Rapid Antibody Diluent (Blocking-Free)

Cat. No.: I1523002 | Pack size: 10 mL | Storage: Store at 2-8°C

### Product Information

| Item                    | Description                                                                                             |
|-------------------------|---------------------------------------------------------------------------------------------------------|
| Specifications & Purity | BioReagent,sterile,Suitable for Immunofluorescence(IF)                                                  |
| Stability And Storage   | Store at 2-8°C long term (12 months).                                                                   |
| Storage Conditions      | Store at 2-8°C                                                                                          |
| Shipped In              | Wet ice This product requires cold chain shipping. Ground and other economy services are not available. |

### Product Description

This diluent is a ready-to-use working solution, specially designed for diluting primary and secondary antibodies in immunofluorescence experiments such as Immunofluorescence (IF) and cellular immunofluorescence. Its formula contains stabilizers and protective ingredients, which can maintain the activity of diluted antibodies, accelerate the binding of primary antibodies to antigens, and greatly save experimental time. Antibody working solutions diluted with this product can be stored at 4°C and reused for no less than one week, helping to save valuable antibody reagents.

1-hour incubation replaces overnight incubation; one-step incubation with no blocking required.

Compatibility: This diluent is also suitable for 4°C overnight incubation, and is universally applicable to both primary and secondary antibodies.

Main Ingredients: Proprietary buffer system, protein stabilizer, preservative.

## Reference Protocol for Immunofluorescence (IF) Experiment of Paraffin Sections

| Step                            | Operation                                                                                                                                                                                          | Key Details and Recommendations                                                                                                                                                                                                        |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Deparaffinization and Hydration | Deparaffinize sections with xylene, followed by gradient ethanol hydration to distilled water.                                                                                                     | Ensure complete deparaffinization; otherwise, uneven staining or high background is likely to occur.                                                                                                                                   |
| Antigen Retrieval               | Perform heat-induced antigen retrieval with an appropriate buffer (e.g., Citrate Buffer, Cat. No. C752119 or EDTA Buffer, Cat. No. E745530) according to the requirements of the primary antibody. | Allow the sections to cool naturally to room temperature after retrieval before proceeding to the next steps.                                                                                                                          |
| Endogenous Enzyme Blocking      | Incubate sections with Endogenous Peroxidase Blocking Solution (Cat. No. E752115) for 10–30 minutes to eliminate endogenous peroxidase activity.                                                   | Wash thoroughly once with TBST.                                                                                                                                                                                                        |
| Primary Antibody Incubation     | Prepare the primary antibody working solution with this diluent at the initial concentration recommended in the antibody instructions, then add dropwise to the tissue section.                    | Choose one of the two incubation protocols: A. Rapid protocol: Incubate at 37°C for 1–2 hours; avoid drying out of sections at all times. B. Conventional protocol: Incubate overnight at 4°C, then wash thoroughly 3 times with TBST. |
| Secondary Antibody Incubation   | Dilute HRP-conjugated secondary antibody at a ratio of 1:200 to 1:500 using this diluent, and apply dropwise to the sections.                                                                      | Incubate at room temperature or 37°C for 30 minutes to 1 hour. Afterwards, wash thoroughly 3 times with TBST.                                                                                                                          |
| Nuclear Staining                | Counterstain cell nuclei with DAPI (Cat. No. D1372407) for 3–5 minutes.                                                                                                                            | Wash thoroughly 3 times with TBST. This step can be omitted if mounting with DAPI- containing anti-fade mounting medium.                                                                                                               |

| Step     | Operation                                                                             | Key Details and Recommendations |
|----------|---------------------------------------------------------------------------------------|---------------------------------|
| Mounting | Directly mount the washed sections with Anti-Fade Mounting Medium (Cat. No. A752104). | /                               |

## Incubation Time Selection

You can appropriately adjust the incubation time according to the expression level of the target protein:

| Protocol   | Primary Antibody Incubation | Secondary Antibody Incubation       | Application Scenario                                                                                   |
|------------|-----------------------------|-------------------------------------|--------------------------------------------------------------------------------------------------------|
| Protocol 1 | 37°C, 1–2 h                 | Room temperature / 37°C, 30 min–1 h | High-abundance proteins with relatively strong non-specific binding; results required on the same day. |
| Protocol 2 | 4°C, Overnight              | Room temperature / 37°C, 30 min–1 h | Detection of low- abundance targets; pursuit of high signal- to-noise ratio.                           |

## Precautions

1. Scope of application: This product is only for scientific research use by professionals. It shall not be used for clinical diagnosis, treatment, or any food and pharmaceutical applications.
2. Antibody recovery: To prolong the service life of recovered antibodies, it is recommended to perform primary antibody incubation at 4°C.
3. Key operational notes.
4. Antibody dilution: Always follow the starting dilution concentration recommended in the antibody manufacturer's instructions for primary antibody preparation. The general starting dilution range for secondary antibodies is 1:200 to 1:500.

## Contact & Global Offices

Whether you have a technical question, need help with a quotation, or want to inquire about an order, our regional teams are ready to assist. Please contact the office for your region; for general inquiries, the North American office is the corporate primary.

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## Limitations & Disclaimer

- ☐ For Research Use Only (RUO). Not for use in human or animal diagnostics, therapeutics, or in vivo applications. Not for food, cosmetic, or household use.
- ☐ This product is not a CE-marked in vitro diagnostic device under IVDR (EU) 2017/746 and is not an FDA-cleared device under 21 CFR. Use is restricted to verified businesses, institutions, and qualified professionals for research and development purposes.
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