



# Immunofluorescence (IF) Staining

Fluorescent Antibody Detection Protocol

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## Protocol Overview

Immunofluorescence (IF) is a technique that uses fluorescently-labeled antibodies to detect specific proteins or antigens in tissue sections. This protocol is designed for both paraffin-embedded and cryosectioned tissue samples.



### Duration

**Day 1:** ~3 hours (+ overnight incubation)

**Day 2:** ~2 hours

**Total:** 2 days



### Key Steps

1. Deparaffinization/Antigen retrieval
2. Blocking (1 hour)
3. Primary antibody (overnight)
4. Secondary antibody (1 hour)
5. DAPI and mounting



**Important Notes:**

- Protect slides from light after adding fluorescent antibodies
- Work quickly during mounting to prevent drying
- Store stained slides at 4°C protected from light
- Image slides within 1-2 weeks for best results



### Safety Information

- Always work with xylene in a fume hood (for paraffin sections)
- Wear appropriate PPE (lab coat, gloves, safety glasses)
- Handle antibodies with care - some may contain sodium azide preservative
- Dispose of fluorescent waste appropriately
- Be cautious with hot liquids during antigen retrieval
- Follow proper storage conditions for antibodies (typically 4°C or -20°C)

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## About This Protocol

Immunofluorescence (IF) staining protocol for detecting specific proteins using fluorescently-labeled antibodies in tissue sections.

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## Contact

Román A Cáceres

University of Cincinnati:

Cacerera@mail.uc.edu

Emory University:  
Racacer@emory.edu

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