Direct immunofluorescence is a technique that allows for the detection of antibody or complement deposition within the skin. Direct immunofluorescence studies are typically utilized when an autoimmune blistering disorder is suspected.

Indirect immunofluorescence can be used to detect antibodies within the circulation. The presence of antibodies in the patient’s serum or blister fluid that are capable of binding to components of an epithelial specimen is assessed. Similar to direct immunofluorescence, this test is typically utilized to aid in the diagnosis of autoimmune blistering disease.

In order to help you better diagnose autoimmune disorders, UNC Dermatology offers both direct and indirect IF studies to complement classical H&E dermatopathology.

Try It Out

1. Direct IF study
   a. Go to Meds and Orders
   b. Select DIF or Dermatopathology Direct Immunofluorescence- Lab 5502D
   c. Accept the order
d. Required fields are site and the differential diagnosis

e. Be sure to mark lesional or perilesional location as well

f. Associate the order with the appropriate diagnosis. One option for unspecified eruption is Rash R21.

g. Accept and sign the order.

h. Obtain a punch biopsy specimen in the usual fashion. The specimen should be taken from normal-appearing skin adjacent to the blister, a perilesional biopsy. (A biopsy of lesional skin is more likely to result in false negative results because of destruction of the immunoreactants by the inflammatory process.) Place the biopsy in a specimen container with Michel’s medium rather than formalin. Michel’s medium is available from the Dermatology IF lab.

i. Label the specimen bottle appropriately with the patient name and MRN.

j. Print out the request form and place in the specimen bag.

2. Indirect IF studies

a. Go to Meds and Orders

Select IIF. Note: This is listed as a dermatopathology specimen even though it is not tissue.
b. Accept

c. Required fields are specimen source and differential diagnosis

d. Accept and associate as above. Sign order.

e. Please draw 2 red tops if you are ordering IIF on serum. Otherwise collect blister fluid (x mL)

f. Label tubes and print out a copy of the signed order and place in bag with specimens.

Continued on next page.
3. Both of these specimen types (biopsy and fluid) should go by courier to the dermatopathology lab at UNC.

You Can Also...

- Send a separate specimen to UNC Dermatopathology for H & E. This should be a separate order in a separate bag. See Dermatopathology Tip Sheet.
- Specimens for light microscopic examination are usually obtained from lesional tissue. If small vesicles are present, removal of an entire lesion is preferred. For larger lesions, the specimen should be obtained from the edge of a blister; the specimen should contain both portions of the blister and intact skin.