



iC3b EIA

For **Research Use Only**. Not for use in diagnostic procedures.

Background

The MicroVue iC3b EIA measures the amount of iC3b.

Activation of the classical or alternative pathway leads to the generation of iC3b following cleavage of complement protein C3 into two fragments – C3a and C3b. The C3a fragment acts as a complement anaphylatoxin while C3b performs many biological functions including opsonization activity to hasten phagocytosis. CR1 or Factor H act as a cofactor and binds to C3b allowing Factor I to cleave this fragment at two sites. This yields inactive C3b and iC3b which expresses new biological activity upon interaction with cellular receptors.

Levels of iC3b can be significantly elevated in samples from patients with autoimmune diseases such as rheumatoid arthritis and systemic lupus erythematosus (SLE). Increased levels may also be present in other conditions in which complement activation is known to occur such as infection, myocardial infarction and glomerulonephritis.

Format

- 96-well microplate with reagents sufficient to test 40 samples in duplicate
- Standard and Controls included

Assay Steps

- Dilute Wash Buffer Concentrate and reconstitute Standards and Controls
- Dilute Samples between 1:25 and 1:200 in iC3b Specimen Diluent
- Add 100 µL of Standards, Controls, diluted specimens into assay wells
- Incubate 30 minutes ±1 at 15°C to 30°C
- Wash 5 times with Wash Buffer
- Add 50 µL of iC3b Conjugate
- Incubate 30 minutes ±1 at 15°C to 30°C
- Prepare 1X Substrate Solution
- Wash 5 times with Wash Buffer
- Add 100 µL 1X Substrate Solution
- Incubate 30 minutes ±1 at 15°C to 30°C
- Add 50 µL Stop Solution
- Read the OD at 405 nm

Assay Performance

Method: Direct Capture

Samples: Diluted 1:25 to 1:200

Sample Volume: 100 µL

Limit of Detection: 0.012 µg/mL

Assay Range: 0 – 2.1 µg/mL

Assay Time: < 2 hours

