

2. At position 2, the reagent 1 pipettor dispenses microparticles and the acridinium-labeled conjugate.
3. At position 3, the vortexer mixes the sample, microparticles, and the conjugate.
4. At positions 4 through 40, the reaction mixture incubates for 11 minutes.
5. At positions 41 through 44, wash zone 2 washes the reaction mixture in the RV and then removes unbound materials.
6. At position 48, the Pre-Trigger Solution nozzle dispenses the Pre-Trigger Solution into the reaction mixture, and then the vortexer mixes the reaction mixture.
7. At position 52, the CMIA optical system performs a background read, the Trigger Solution nozzle dispenses the Trigger Solution into the reaction mixture, and then the CMIA optical system performs an activated read.
8. At position 54, the liquid waste arm aspirates the liquid waste from the RV.
9. At position 55, the RV unloader removes the RV and discards it into the solid waste container.

Related information...

[Assay processing \(i-series\)](#), page 425

[Processing center \(Alinity i\)](#), page 103

**STAT assay processing for Two Step 4-4 (i-series)**

A Two Step 4-4 assay protocol is a method of assay processing in which the sample and some reagents are added to the reaction vessel (RV) before the microparticles are washed. The conjugate reagent is added to the RV after the microparticles are washed. A Two Step 4-4 assay protocol has a shorter incubation time than a Two Step 18-4 assay protocol. The total processing time for a Two Step 4-4 assay protocol is 18 minutes, which includes an 8-minute incubation time.

The following steps describe the assay processing and the CMIA reaction that occurs during a Two Step 4-4 assay protocol.