



Replicates within Plate Show Poor Reproducibility

Possible causes

Excessive time was taken to add samples, controls or reagents to the assay plate.

Multichannel pipette was not functioning properly.

There was inconsistent washing or washer system malfunctioning.

There was poor distribution of antibody in the sample.

Recommended actions

Be sure to have all materials set up and ready to use quickly. Use a multichannel pipette to add reagents to multiple wells simultaneously. Rack controls with samples and dispense them onto the plate at the same time as the samples.

Verify pipette calibration and check that tips are on tight. Be sure all channels of the pipette draw and dispense equal volumes.

Verify the performance of the washer system. Have the system repaired if any ports drip or dispense/aspirate poorly.

If the sample was thawed or refrigerated, make sure it was mixed prior to dilution. Diluted samples also need to be mixed prior to adding them to the plate.