

Poor Reproducibility Plate to Plate

Possible causes	Recommended actions
Inconsistent incubation times occurred from plate to plate.	Time each plate separately to ensure that plates have consistent incubation periods.
Inconsistent washing occurred from plate to plate.	Use the same number of washes for each plate. Verify the performance of the washer system. Have the system repaired if any ports drip or dispense or aspirate poorly.
Pipette was working improperly.	Check the pipette calibration. Verify that pipette tips are on tight before use and that all channels draw and dispense equal volumes.
Controls and samples were at different temperatures.	Be sure to allow sufficient time for sample diluent, samples and controls to come to room temperature by removing them from the box. Larger volumes will require longer equilibration time. If using a water bath to hasten equilibration, make sure it is maintained at room temperature; do not use a warm water bath for controls, samples or diluent.
Reagents were being used from different lots.	If running two different lots at the same time, make sure to label reagent trays, etc., so all reagents within a lot are used with the corresponding plates.