



complexity simplified.

Product Information Sheet

SpeedBead® ImageStream®^x System Calibration Reagent

Product Information

Catalog Number 400041
Quantity 16 Tubes – 10 mL each
Storage Sodium azide. Store 4 to 25°C

Description

The SpeedBead® calibration reagent is integral to the operation of the ImageStream® system. The beads are used by ASSIST to calibrate the instrument daily. During normal operation the system uses the SpeedBead® scatter signal to monitor and synchronize the flow of the sample as well as maintain focus and core tracking. The kit contains 16 tubes of beads each with 10 mL of reagent. Each tube can be left in the instrument until depleted.

Storage

The SpeedBead® reagent should remain in the instrument and used at room temperature until empty. For long term storage, place upright at 4°C and do not freeze.

Preparation and use of SpeedBead® Reagent on the ImageStream® System

The instrument is outfitted with an agitator to automatically maintain a single bead suspension and a bubble detector to alert the user when the tube of SpeedBead® tube is empty. The tube of SpeedBead® reagent should be replaced when the volume is low to prevent air from entering the bead supply line.

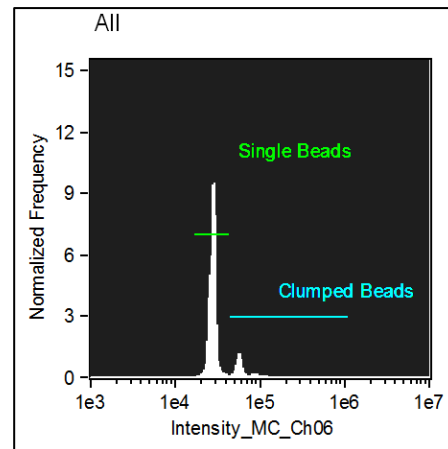
To load a full tube of beads, first vortex the new tube vigorously. Open the fluidics compartment door on the front of the instrument. The SpeedBead® tube clamp is located to the left of the reagent tanks.

Remove the empty tube and snap the new tube in place in the agitator clamps such that the bead uptake line reaches the bottom of the SpeedBead® tube and the cap is above the agitator clamp and free to rotate. Make sure the new tube is secure and close the reagent chamber doors.

When the new tube is installed, and fluidics are started the “Prime Beads” script will automatically run. A core should form and the instrument will be ready to load the next sample.

SpeedBead® Aggregation Testing

Over time (months), the SpeedBead® reagent will tend to clump. The degree of clumping can be assessed by acquiring a data file when the ImageStream® fluidics are running without a cell sample.



From the advanced menu, access the Fluidics tab and click off the ‘Remove Beads’ option.

The beads should now be running at about 2000 objects per second.

Minimum value for proper cytometer

operation is 1000 objects per second.

Collect 50,000 - 75,000 events (ALL) with side scatter laser at about 2 mW and plot scatter intensity.

The doublet gate should be below 15%.

Note

The ImageStream® system automatically recognizes the SpeedBead® reagent and removes it from the data file.

Occasionally, data files may contain SpeedBead® images that can be removed as debris during analysis.