

SO YOU WANT TO WORK WITH BEADS?

We'd love for you to work with them, too! To get off to a good start, you'll need a few accoutrements. Or at least some friends in the Biology or Chemistry department who have them, and aren't averse to sharing.



PIPETTES

Most microspheres are supplied, used and stored in suspension, and unless you can truly do the "perfect pour," you'll need pipette for sampling and transferring



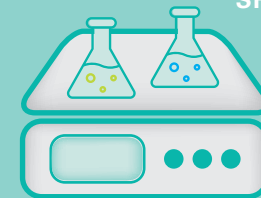
LABWARE

Every well-appointed lab requires assorted vessels to use and store beads—from plastic test tubes, microplates and bottles to glass flasks and beakers. And don't forget the Parafilm and aluminum foil for covering and wrapping tubes and beakers when needed.



CENTRIFUGE

For spheres that are $0.5\mu\text{m}+$, centrifugation is the most common method of separation during buffer exchange / wash steps. Ultracentrifugation devices like our Vivaspin (AA022) or dialysis are used for washing smaller ($0.02\mu\text{m} - 0.5\mu\text{m}$) spheres. (Check out our magnetic separation units for magnetic particles).



SHAKERS / MIXERS

Provides constant mixing throughout particle incubation steps (protein coupling, cell/particle mixing, etc) (other considerations include tube rotators and rollers)



VORTEX

Rapidly redispersing particles and preventing clumps. (For more intense energy, to break up persistent aggregation try a Sonicator)



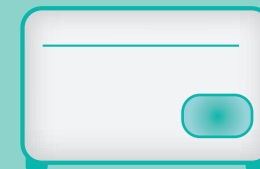
MICROSCOPE

If it isn't already, your microscope is going to be your best friend. A simple check of a bit of the bead suspension (400X) can alert to problems such as aggregation / stickiness, concentration, debris, etc., that might impact performance in the final application.)



COOLER / FRIDGE

Helps prevent or deter microbial growth in the suspension over time, as well as preserve fluorescent particles longer.



ANALYTICAL INSTRUMENTS

Includes cell analyzers, particle sizers, flow cytometers