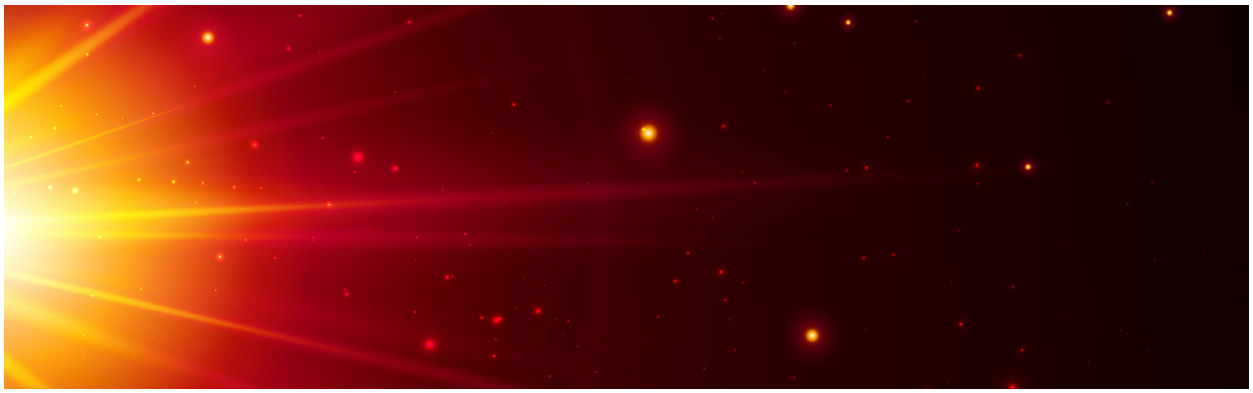
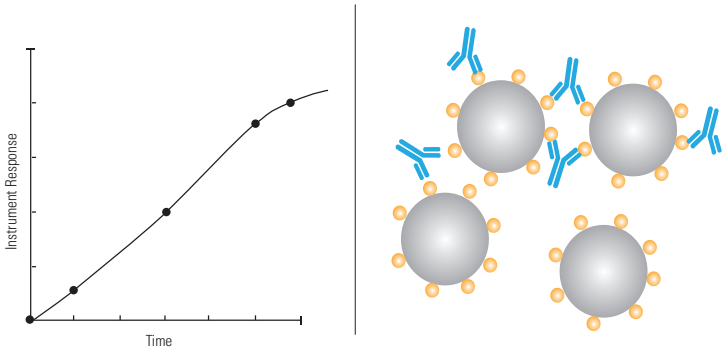
Turbidimetric Assays



The assay of clinically-relevant biomarkers is important for treating critical medical conditions such as cardiovascular disease, thrombosis, bacterial infections, and active inflammatory conditions. Point-of-care (POC) turbidimetric assays are an important diagnostic tool for critical medicine, as they permit the rapid and sensitive measurement of disease-related biomarkers that may speak to the patient's condition, prognosis and treatment regimen.

Turbidimetric assays rely on the analyte-mediated agglutination of a suspension of ligand-coated particles. Changes in the light scattering properties of the suspension are monitored as the particles agglutinate, e.g. as they form doublets, triplets, etc. Assays may be designed such that very small, poorly-scattering spheres begin to scatter light more efficiently upon agglutination, or larger, more efficiently-scattering particles fall out of suspension with agglutination.



Ab /Ag-mediated agglutination in a turbidimetric assay.

Bangs Laboratories' 30 years of experience in microsphere synthesis and fine particle analysis have established us as a leading supplier of polystyrene latex microspheres to IVD companies. We understand what it takes to get a new assay to market, and we have the products and the know-how to support you in your reagent development process, from design through production. For initial screening, our active inventory includes many particles in the range of 0.05µm – 0.5µm, with different formulations and carboxyl content. We additionally offer custom services and bulk manufacturing to meet highly specific needs.

Our Quality Management Sytem has been certified to comply with the requirements of ISO 9001:2008 and ISO 13485:2003 for the design, manufacture, processing, and distribution of microspheres and related products.

References

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CARBOXYLATED POLYSTYRENE

Catalog Number	Nominal Diameter	Specification Range
PC02002	0.050µm	0.040 - 0.060µm
PC02003	0.070µm	0.061 - 0.080µm
PC02004	0.100µm	0.090 - 0.110µm
PC02005	0.125µm	0.115 - 0.135µm
PC02006	0.150µm	0.140 - 0.160µm
PC02007	0.175µm	0.165 - 0.185µm
PC02008	0.200µm	0.190 - 0.210µm
PC02009	0.300µm	0.270 - 0.330µm
PC02010	0.350µm	0.340 - 0.360µm
PC02011	0.400µm	0.370 - 0.430µm
PC03001	0.500µm	0.470 - 0.530µm

Our offerings include options for different levels of carboxylation.

Surface titer	Parking Area
Low	60-100
Medium	35-59
High	10-34

PLAIN POLYSTYRENE

Catalog Number	Nominal Diameter	Specification Range
PS02002	0.050µm	0.040 - 0.060µm
PS02003	0.075µm	0.065 - 0.085µm
PS02004	0.100µm	0.090 - 0.110µm
PS02005	0.125µm	0.115 - 0.135µm
PS02006	0.150µm	0.140 - 0.160µm
PS02007	0.175µm	0.165 - 0.185µm
PS02008	0.200µm	0.190 - 0.210µm
PS02009	0.300µm	0.270 - 0.330µm
PS02010	0.400µm	0.370 - 0.430µm
PS03001	0.500µm	0.470 - 0.530µm
PS03002	0.600µm	0.570 - 0.630µm

Please see BangsLabs.com for all of our available sizes of plain & carboxylated polystyrene microspheres or contact us to discuss your specific needs.