

SeroMAP™ Microspheres, 4mL (L100-S001 thru L100-S100)

Summary and Intended Use

SeroMAP™ Microspheres are polystyrene microspheres internally labeled with fluorescent dyes and contain surface carboxyl groups for covalent coupling of ligands. Varying the concentrations of two internal dyes, 100 different colored Luminex SeroMAP Microspheres compatible with the xMAP® Bead Maps are created. The products are general purpose reagents intended for general laboratory use and may be used in conjunction with other reagents to develop xMAP technology-based serological assays. SeroMAP Microspheres are specifically designed for protein-based serological applications where lower non-specific reactivity is desired. This product is not intended for nucleic acid, agglutination or adsorption applications. For specific instructions and protocols refer to the system manual provided with your instrumentation.

Product Specifications

SeroMAP Microspheres (L100-S001 thru L100-S100, Regions 1 thru 100) are provided in purified water containing 0.036% w/v ProClin® as a preservative. Product specifications are assured up to the expiration date stated on the label with proper handling and storage. The expiration date is intended to be the latest date at which the material should be transformed for its further use. Although continued conformance to specifications is expected following further manufacture, users must characterize and control their formulations to assure assay specific performance.

Package Configuration	Specification
Microsphere Concentration (microspheres/mL)	$12.5 \times 10^6 \pm 1.5 \times 10^6$
Volume (mL)	4.00mL, -0.05/+0.20mL
Microsphere Properties	Specification
Median Microsphere Density (g/mL)	1.05 ± 0.01
Density Homology (g/mL)	≤ 0.01
Mean Microsphere Diameter (µm)	5.6 ± 0.2
Diameter Coefficient of Variation	< 5%
RP1 background	< 100
Luminex100/200 & FLEXMAP 3D Classification Efficiency	$\geq 80\%$
Luminex100/200 & FLEXMAP 3D Misclassification	$\leq 2.0\%$
Luminex100/200 & FLEXMAP 3D Doublet Discrimination Peak	8000 - 12500
Progenitor Microsphere Properties	Specification
Median Microsphere Density (g/mL)	1.05 ± 0.01
Density Homology (g/mL)	≤ 0.01
Mean Microsphere Diameter (µm)	5.6 ± 0.2
Diameter Coefficient of Variation	< 5%
Functional Group	Carboxyl

Limitations

These instructions must be followed to ensure consistency when using the microspheres. Minimize exposure of contents to light to maintain product integrity. The microspheres are hydrophobic in the aqueous medium provided. Do not use this product with strong organic solvents. For specific solvent and buffer compatibility, go to Luminex website Support page https://oraweb.luminexcorp.com/OA_HTML/itflogin.jsp, login and navigate to FAQ section. You may be required to request a login if this is the first time you have visited our site.

Safety Precautions

Although this product is not known to contain hazardous or carcinogenic components at toxic levels, it may be toxic if inhaled, if it comes in contact with skin, or if swallowed. There may be danger of cumulative effects. Keep away from food, drink, and animal feeding stuffs. If product comes in contact with skin, wash immediately with plenty of water. Wear suitable protective clothing. In case of accident or if you feel unwell, seek medical advice immediately and show this product label or container to your medical provider. Material Safety Data Sheet available at http://www.luminexcorp.com/products/reagents/seromap_microspheres.html

SeroMAP™ Microspheres 4mL (L100-S001 thru L100-S100)**Storage**

Store product upright at 2-8°C in the dark. Avoid freezing and heating (> 40°C) in supplied configuration.

Handling

The SeroMAP™ Microspheres settle if left undisturbed. To maintain microsphere concentration integrity, ensure that microspheres are homogeneously resuspended prior to dispensing. The uncoupled microspheres are hydrophobic in the water medium, so care must be taken to avoid excessive or vigorous agitation during resuspension. This promotes microsphere aggregation and container surface adherence, which reduces the available microsphere concentration. Repetitive resuspension and pipetting from the container may affect microsphere concentrations. Follow the instructions below based on the configuration in use to achieve a homogenous resuspension: These microspheres may exhibit some stickiness and this may affect percent yield. The reporter signal may not be directly comparable MicroPlex Microspheres.

Resuspension

Remove from 2-8°C and allow equilibration to room temperature. Prior to dispensing, rotate at approximately 20 rpm for 1-2 minutes (10-15 minutes for a new vial) or mix by gentle inversion for an equivalent amount of time. Dispense immediately. Do not rotate for extended periods of time. Do not vortex.

Protect the microspheres from light at all times during use. For specific use instructions and protocols, refer to the system manual provided with your instrumentation or go to Luminex website Support page https://oraweb.luminexcorp.com/OA_HTML/jtflogin.jsp, login and navigate to FAQ section.

DD Gating

For this microsphere product line, the recommended starting DD gate is 8K to 15K. You should optimize your actual DD gating range for your specific application.

Product Numbering and Order Information

SeroMAP Microspheres are available in 4mL size only for all 100 regions of the 100 region bead map (001 thru 100). The product number on the container label relates to the software target region. The product number on the container label relates to the software target region and contains a suffix representing the product volume. See the following examples:

Product Number	Region Number	Volume	Container Size	Conc. (beads/mL)
L100-S001-04	001	4.0 mL	4 mL	1.25x 10 ⁷ /mL
L100-S100-04	100	4.0 mL	4 mL	1.25x 10 ⁷ /mL

For ordering information go to <http://www.luminexcorp.com/products/orderinginfo.html>



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