# Luminex<sub>®</sub>

### **Product Information Sheet**

### SeroMAP<sup>™</sup> Microspheres, 4mL (L100-S001 thru L100-S100)

### Summary and Intended Use

SeroMAP<sup>TM</sup> 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<sup>®</sup> 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<sup>®</sup> 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 x 10 <sup>6</sup> <u>+</u> 1.5 x 10 <sup>6</sup>
Volume (mL)	4.00mL, -0.05/+0.20mL
Microsphere Properties	Specification
Median Microsphere Density (g/mL)	1.05 <u>+</u> 0.01
Density Homology (g/mL)	<u>&lt;</u> 0.01
Mean Microsphere Diameter (µm)	5.6 <u>+</u> 0.2
Diameter Coefficient of Variation	< 5%
RP1 background	< 100
Luminex100/200 & FLEXMAP 3D Classification Efficiency	<u>&gt;</u> 80%
Luminex100/200 & FLEXMAP 3D Misclassification	<u>&lt;</u> 2.0%
Luminex100/200 & FLEXMAP 3D Doublet Discrimination Peak	8000 - 12500
Progenitor Microsphere Properties	Specification
Median Microsphere Density (g/mL)	1.05 <u>+</u> 0.01
Density Homology (g/mL)	<u>&lt;</u> 0.01
Mean Microsphere Diameter (µm)	5.6 <u>+</u> 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 <a href="https://oraweb.luminexcorp.com/OA\_HTML/jtflogin.jsp">https://oraweb.luminexcorp.com/OA\_HTML/jtflogin.jsp</a>, 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 <a href="http://www.luminexcorp.com/products/reagents/seromap\_microspheres.html">http://www.luminexcorp.com/products/reagents/seromap\_microspheres.html</a>



# **Product Information Sheet**

### SeroMAP<sup>™</sup> 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<sup>™</sup> 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 <u>https://oraweb.luminexcorp.com/OA\_HTML/jtflogin.jsp</u>, 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-S <b>001</b> -04	001	4.0 mL	4 mL	1.25x 10 <sup>7</sup> /mL
L100-S <b>100</b> -04	100	4.0 mL	4 mL	1.25x 10 <sup>7</sup> /mL

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



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## SeroMAP<sup>™</sup> Microspheres Product Number List Attachment Table 1

Order Number	Product Description	Size	Order Number	Product Description	Size
L100-S001-04	SeroMAP Microspheres, Region 001	4mL	L100-S051-04	SeroMAP Microspheres, Region 051	4mL
L100-S002-04	SeroMAP Microspheres, Region 002	4mL	L100-S052-04	SeroMAP Microspheres, Region 052	4mL
L100-S003-04	SeroMAP Microspheres, Region 003	4mL	L100-S053-04	SeroMAP Microspheres, Region 053	4mL
L100-S004-04	SeroMAP Microspheres, Region 004	4mL	L100-S054-04	SeroMAP Microspheres, Region 054	4mL
L100-S005-04	SeroMAP Microspheres, Region 005	4mL	L100-S055-04	SeroMAP Microspheres, Region 055	4mL
L100-S006-04	SeroMAP Microspheres, Region 006	4mL	L100-S056-04	SeroMAP Microspheres, Region 056	4mL
L100-S007-04	SeroMAP Microspheres, Region 007	4mL	L100-S057-04	SeroMAP Microspheres, Region 057	4mL
L100-S008-04	SeroMAP Microspheres, Region 008	4mL	L100-S058-04	SeroMAP Microspheres, Region 058	4mL
L100-S009-04	SeroMAP Microspheres, Region 009	4mL	L100-S059-04	SeroMAP Microspheres, Region 059	4mL
L100-S010-04	SeroMAP Microspheres, Region 010	4mL	L100-S060-04	SeroMAP Microspheres, Region 060	4mL
L100-S011-04	SeroMAP Microspheres, Region 011	4mL	L100-S061-04	SeroMAP Microspheres, Region 061	4mL
L100-S012-04	SeroMAP Microspheres, Region 012	4mL	L100-S062-04	SeroMAP Microspheres, Region 062	4mL
1100-S013-04	SeroMAP Microspheres, Region 013	4ml	1100-\$063-04	SeroMAP Microspheres, Region 063	4ml
L 100-S014-04	SeroMAP Microspheres, Region 014	4ml	1100-S064-04	SeroMAP Microspheres, Region 064	4ml
L 100-S015-04	SeroMAP Microspheres, Region 015	4ml	1100-\$065-04	SeroMAP Microspheres Region 065	4ml
L 100-S016-04	SeroMAP Microspheres, Region 016	4ml	1100-\$066-04	SeroMAP Microspheres, Region 066	4ml
L 100-S017-04	SeroMAP Microspheres, Region 017	4ml	1100-5067-04	SeroMAP Microspheres, Region 067	4ml
L 100-S018-04	SeroMAP Microspheres, Region 018	4ml	1100-\$068-04	SeroMAP Microspheres Region 068	4ml
L 100-S019-04	SeroMAP Microspheres, Region 019	4ml	1100-\$069-04	SeroMAP Microspheres, Region 069	4ml
L 100-S020-04	SeroMAP Microspheres, Region 020	4ml	1100-\$070-04	SeroMAP Microspheres, Region 070	4ml
L 100-S021-04	SeroMAP Microspheres, Region 021	4ml	L 100-S071-04	SeroMAP Microspheres, Region 071	4ml
L 100-S021-04	SeroMAP Microspheres, Region 021	4mL 4ml	L100-S072-04	SeroMAP Microspheres, Region 077	4mL
L 100-S022-04	SeroMAP Microspheres, Region 022	4mL 4ml	L100-S072-04	SeroMAP Microspheres, Region 072	4mL
L 100-S023-04	SeroMAP Microspheres, Region 023	4mL 4ml	L100-S073-04	SeroMAP Microspheres, Region 073	4mL
L 100 S025 04	SeroMAP Microspheres, Region 024	4mL	1100 \$075 04	SeroMAR Microspheres, Region 074	4mL
L 100 S025-04	SeroMAP Microspheres, Region 025	4mL	L100-S075-04	SeroMAP Microspheres, Region 075	4mL
L 100 S027 04	SeroMAP Microspheres, Region 020	4mL	1100 \$077 04	SeroMAR Microspheres, Region 077	4mL
L 100 S027-04	SeroMAP Microspheres, Region 027	4mL		SeroMAP Microspheres, Region 077	4mL
L 100 S020-04	SeroMAP Microspheres, Region 020	4mL		SeroMAP Microspheres, Region 078	4mL
L 100-S029-04	SeroMAP Microspheres, Region 030	4mL	1100-5080-04	SeroMAP Microspheres, Region 080	4mL
L 100 S031 04	SeroMAP Microspheres, Region 031	4mL		SeroMAR Microspheres, Region 080	4mL
L100-S031-04	SeroMAP Microspheres, Region 031	4111L	L100-S081-04	SeroMAR Microspheres, Region 081	4111L
L 100 S032-04	SeroMAP Microspheres, Region 032	4mL	L100-5082-04	SeroMAR Microspheres, Region 082	4111L
L100-S033-04	SeroMAP Microspheres, Region 033	4mL	L100-S083-04	SeroMAP Microspheres, Region 083	4mL
L100-S034-04	SeroMAR Microspheres, Region 034	4111L	L100-S085-04	SeroMAR Microspheres, Region 084	4111L
L100-S035-04	SeroMAP Microspheres, Region 035	4111L	L100-S085-04	SeroMAR Microspheres, Region 085	4111L
L100-S030-04	SeroMAR Microspheres, Region 037	4111L	L100-S087-04	SeroMAD Microspheres, Region 087	4111L
1100 9029 04	SeroMAP Microspheres, Region 037	4111L	1100-3087-04	SeroMAP Microspheres, Region 087	4111L
	SoroMAD Microspheres, Region 038	4111L		SeroMAP Microspheres, Region 088	4111L
1100 \$040 04	SeroMAP Microspheres, Region 039	4111L	1100-3069-04	SeroMAR Microspheres, Region 089	4111L
	SeroMAP Microspheres, Region 040	4111L		SeroMAP Microspheres, Region 004	4111L
1100-3041-04	SeroMAP Microspheres, Region 041	4111L	1100-3091-04	SeroMAP Microspheres, Region 002	4111L
L100-S042-04	SeroMAR Microspheres, Region 042	4111L	L100-S092-04	SeroMAD Microspheres, Region 092	4111L
	SeroMAP Microspheres, Region 043	4111L	1100 5004 04	SeroMAP Microspheres, Region 093	4111L
	SeroMAD Microspheres, Region 044	4mL	L100-S094-04	SeroMAD Microspheres, Region 094	410L
	SeroMAD Microspheres, Region 045	4mL		SeroMAD Microspheres, Region U95	4mL
	SeroMAD Microspheres, Region 046	4mL	L100-S096-04	SeroMAD Microspheres, Region 096	4mL
L 100-5047-04	SeroMAD Microspheres, Region 047	4mL	L100-S097-04	SeroMAD Microspheres, Region 097	4mL
	SeroMAD Microspheres, Region 048	4111L		SeroMAD Microspheres, Region 098	4111L
	SoroMAP Microspheres, Region 049	4111L		SeroMAP Microspheres, Region 099	4111L
L100-3030-04	ServiviAF milliospheres, Region 050	4111L	L100-3100-04	Seruviar microspheres, Region 100	4111L