

MicroPlex™ Microspheres (LC10001 thru LC10500)

For Further Manufacture

Summary and Intended Use

MicroPlex Microspheres are internally labeled with fluorescent dyes and contain surface carboxyl groups for covalent coupling of ligands. The products are general use components for further manufacture of xMAP bioassays. For specific use instructions and protocols refer to the system manual provided with your instrumentation.

Product Specifications

MicroPlex Microspheres (LC10001 thru LC10500, Regions 1 thru 500) 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)	$12.5 \times 10^6 \pm 1.5 \times 10^6$
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	$\geq 80\%$
FLEXMAP 3D Misclassification	$\leq 2.0\%$
Luminex100/200 Misclassification (Regions 1 thru 100 only)	$\leq 1.0\%$
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	$< 5\%$
Carboxyl Loading ($\mu\text{eq/g}$)	1.95 ± 0.35

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/jtflogin.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/microplex_microspheres.html

Storage

Store product upright at 2-8°C in the dark.

MicroPlex™ Microspheres (LC10001 thru LC10500)**Handling**

The MicroPlex 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:

For 1 mL volume configuration:

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

For 4 mL and 16 mL volume configurations:

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.

Product Numbering and Order Information

MicroPlex Microspheres are available in the following configurations. 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)
MicroPlex Microspheres Regions 1 thru 500				
LC10001-01	001	1.0 mL	4 mL	1.25x 10 ⁷ /mL
LC10500-01	500	1.0 mL	4 mL	1.25x 10 ⁷ /mL
MicroPlex Microspheres Regions 1 thru 100 Only				
LC10001-04	001	4.0 mL	4 mL	1.25x 10 ⁷ /mL
LC10100-16	100	16.0 mL	16 mL	1.25x 10 ⁷ /mL

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



Luminex Corporation
12212 Technology Blvd.
Austin, Texas 78727 USA
www.luminexcorp.com

For technical support:
Call: 877-785-2323 (U.S. and Canada)
+1 512-381-4397 (International)
Fax: 512-219-0544
E-mail: support@luminexcorp.com

