

# Echelon Biosciences Inc.

## PC/PS Lipid Microparticles

Product # P-B1PCPS

**Description:** Lipid microparticles are beads with attached phospholipids with the phospholipid headgroups exposed and available for biological interactions. Phosphatidylserine (PS) is an anionic, intracellular phospholipid component of the cell membrane and is involved in cell signaling including apoptosis. Phosphatidylcholine (PC) is primarily an extracellular phospholipid component of cell membranes and is a key structural lipid.

**Technical Notes:**

1. Total lipid concentration is approximately 1  $\mu\text{mol}$  per 1 mg particles, at a PC to PS ratio of 75:20.
2. Trace amounts of a fluorescent lipid, PE-NBD, is embedded in the particles. The fluor has maximal excitation/emission at approximately 460/540 nm.
3. Particle comprised of a silica core and is 3  $\mu\text{m}$ .

**Formulation:** Lipid beads are provided at approximately  $2 \times 10^7$  particles/mL in PBS buffer, pH 7.4, 0.02% sodium azide.

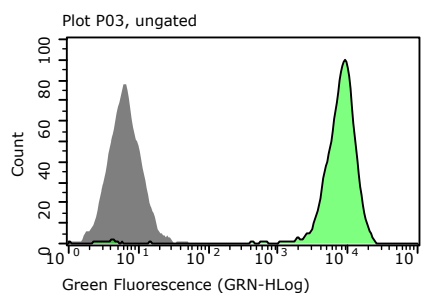
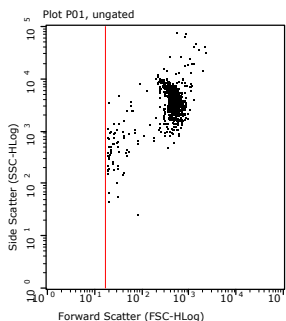
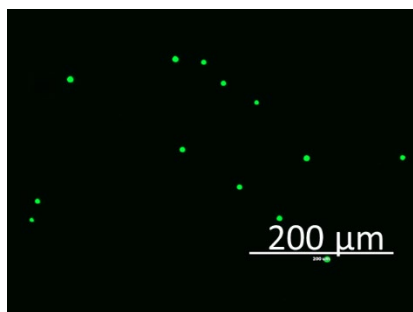
**Storage:** Store product at 2-4 °C. Do not freeze.

**Preparation notes:** Prior to use it is recommended to:

1. Sonicate the lipid beads for 5-10 minutes in a water sonication bath followed by 1 minute of vortexing to ensure a uniform suspension.
2. For sensitive experiments: Rinse beads in 1 x PBS buffer, pH 7.4, followed by centrifugation @10,000 xg for 10 minutes to remove 0.02% sodium azide.

**QA/Product Testing:** PC/PS Lipid Microparticles show green fluorescence by microscopy and flow cytometry.

**Resources:** Visit our website [www.echelon-inc.com](http://www.echelon-inc.com) or phone 801.588.0455.



Left: PC/PS Lipid Microparticles imaged at 470 nm excitation/525 emission with GFP filter at 20X magnification.

Middle: Flow cytometry dot plot of PC Lipid Microparticles. The x-axis is relative size and the y-axis is particle complexity.

Right: Flow histogram contrasting PC Lipid Microparticles with non-fluorescent microparticles using a Millipore Guava 8HT. The x-axis represents fluorescence intensity.

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