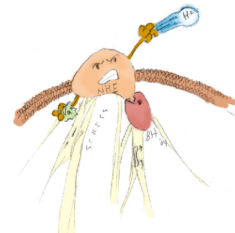


# Lysophosphatidic Acid (LPA) Preparation Protocol



Final Concentration: 3.0 mM

- 1) Bring LPA (freezer in plastic desiccator box) to room temp before opening. LPA is hygroscopic (loves water) and will absorb water from the air and “gum up” if it is cold when opened.
- 2) Measure out between 0.002 and 0.001 grams of LPA (freezer). Use the balance that goes to five decimal spaces.
- 3) Convert the grams to milligrams.
- 4) Divide mass of LPA (in mg) by 1.213 mg/mL. The resulting number from this calculation will give you the number of mL of PBS that you need to add to the powdered LPA.
- 5) Sonicate powder and PBS in a **glass** test tube until the LPA is dissolved.

FYI - *Calcium can bind to the lipid and cause it to ppt. Some scientists use BSA in the solution when sonicating. This acts as a carrier and can change the effective concentration of LPA. LPA is only good for the day. Do not freeze or re-use it. LPA is from Avanti Polar Lipids (white labeled clear bottle) cat # 857120P. MW=404.2.*

The formal name is 1-myristoyl-2-hydroxy-sn-glycerol-3-phosphate.