

SYNTHETIC PHOSPHOLIPIDS

Bilayers of phospholipids constitute the primary structural element in biological membranes. Natural and synthetic phospholipids have found many applications, e.g., liposomes for controlled delivery of drugs, vitamins and cosmetic materials.

The synthesis of phospholipids is a multi-step process. The key steps are (1) preparation of CdCl_2 complex of GPC (glycero-3-phosphocholine), and (2) synthesis of the lipid by reacting a fatty acid with CdCl_2 :GPC complex. We have developed a few-step cost effective process for the synthesis of symmetrical lipids. We have been doing custom synthesis of specialty lipids since 1987. We reduced the cost of making a few specialty phospholipids from over \$150,000/kg to ~\$5,000/kg for a customer. The cost of making phospholipids of commercially available acids would be much lower. If you are interested in large (kilogram) quantity of GPC please contact us at sirad@jplabs.com