Role of Phospholipids in Hormonal Action In this way, phospholipids are vital to hormonal action as these biological molecules form the basic structure of plasma membranes whose integrity is necessary for effective hormone function. In addition, phospholipids can be turned into some biological active lipid substances such as diacylglycerol and phosphatidic acid. These second messengers amplify the signal .of hormones and lead to cellular responses like metabolism or gene expression