

Arachidonic acid is present mainly as esterified in the phospholipid pool of cell membrane. It is often esterified to the hydroxyl on C2 of glycerophospholipids, especially phosphatidyl inositol (Tanaka 2003) (Figure 1.4)

Arachidonate is released from phospholipids by hydrolysis catalyzed by phospholipase A₂. This enzyme hydrolyzes the ester linkage between a fatty acid and the hydroxyl at carbon 2 of the glycerol backbone, releasing the fatty acid arachidonate and a lysophospholipid as products (Sekharudu et al., 1992; Diwan, 2008).

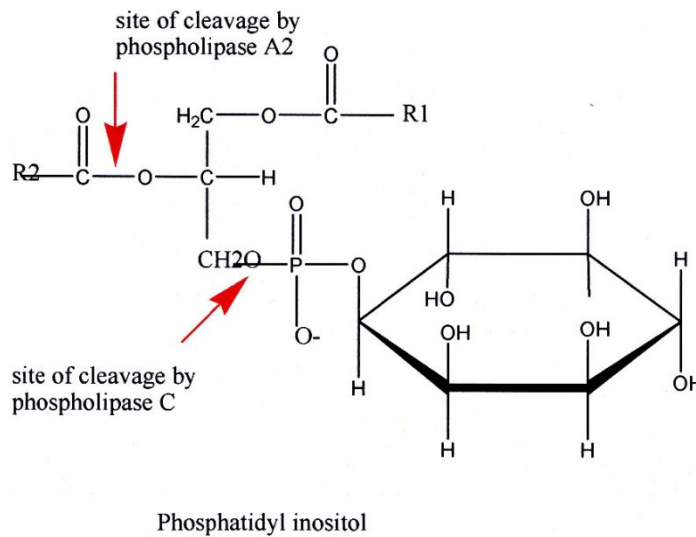


Figure 1.4 The site of phospholipase A₂ action on phosphatidyl inositol to release arachidonic acid