

antibody stimulation for mast cells. General cell damage as well triggers prostaglandins activation in some cell types (miller, 2006).

Phospholipase C enzyme is another source for arachidonic acid.

As a part of phosphatidyl inositol signal cascade, phosphatidyl inositol is phosphorylated to phosphatidyl 4,5 biphosphate. Cleavage of phosphatidyl 4, 5 biphosphate by phospholipase C yields Diacylglycerol (DAG) and inositol triphosphate (IP3). Arachidonate released from diacylglycerol is then catalyzed by diacylglycerol lipase (Tang et al., 2006).

Arachidonic acid is a substrate for cyclic pathway. This pathway is branches mainly into either leukotrienes or prostaglandins and thromboxanes. The earlier branch is catalyzed by lipooxygenase while the later by cyclooxygenase (COX). (Figure 1.5)