

1.2 Prostaglandins

Are a group of lipid compounds that are derived enzymatically from fatty acids and have important functions in the animal body. Every prostaglandin contains 20 carbon carboxylic acid containing a cyclopentane ring and a hydroxyl group (Fig1.2). (Nelson, R. J. 2005).

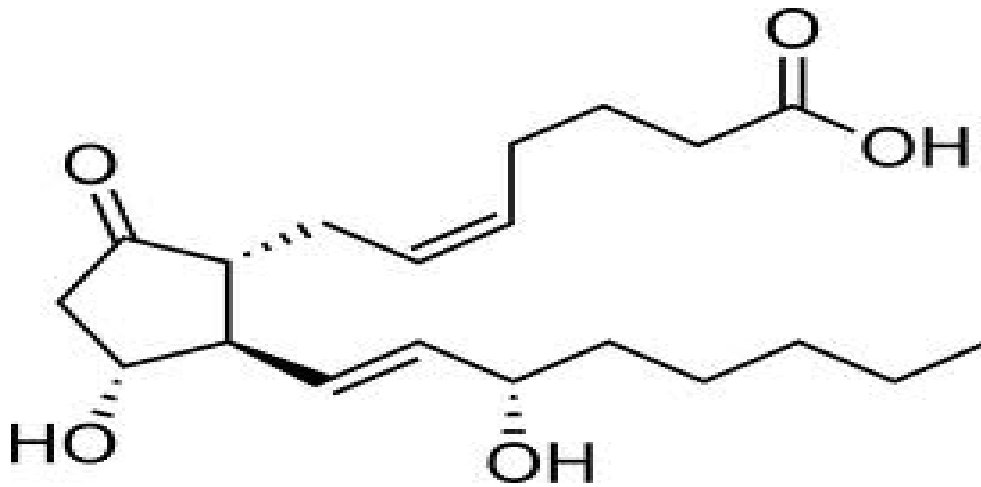


Figure 1.2 Prostaglandin E₂ structure.

prostaglandin derived from the prostate gland. When prostaglandin was first isolated from seminal fluid in 1935 by the Swedish physiologist Ulf von Euler (Von Euler 1935).

They are considered as mediators and have a variety of strong physiological effects, such as regulating the contraction and relaxation of smooth muscle tissue. They differ from hormones in that they are not produced at a discrete site but in every cell of the body except red blood cells.

The prostaglandins, together with the thromboxanes and prostacyclins, form the prostanoid class of fatty acid derivatives, a subclass of eicosanoids.