Renin

Renin is an enzyme that is produced and secreted by the juxtaglomerular cells of the kidney. The stimulus for its secretion is a drop in blood pressure. Renin catalyzes the conversion of **angiotensinogen** (or renin substrate) to **angiotensin I,** which is also enzymatically converted to **angiotensin II**. The conversion of angiotensin I to angiotensin II is catalyzed by angiotensin-converting enzyme (ACE), which is mainly found in the endothelial cells of the pulmonary vessels.

Angiotensin II increases blood pressure by two main mechanisms – vasoconstriction and renal water and salt retention.

Angiotensin I has only a mild vasoconstrictive effect and renin has no vasoactive effects.

Links

Related articles

- The renin-angiotensin-aldosterone system
- Angiotensin converting enzyme inhibitors
- Vylučovací soustava
- ADH

Source

GUYTON, Arthur C – HALL, John E. *Textbook of Medical Physiology.* 10. edition. Philadelphia, Pa.; W. B. Saunders, c2000. 2000. 0 pp. ISBN 72168677X.