

# 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.