

Somatostatin

Somatostatin (= hormone inhibiting growth hormone) is a hormone of a peptide nature formed mainly in the hypothalamus and D-cells endocrine part of the pancreas and gastric and intestinal mucous membrane. It occurs in two forms, which differ from each other in the number of amino acids in the peptide chain. The shorter form (about 14 amino acids) is produced mainly in the CNS, the longer form (about 28 amino acids) is mainly secreted in the GIT.

pancreatic D-cells, nc.
ventromedial hypothalamus
polypeptide of 14 or 28 AMK
pituitary gland, GIT
G protein-coupled somatostatin
receptors
182450

Somatostatin inhibits the secretion of growth hormone and thyrotropin in the adenohypophysis, glucagon and insulin in the endocrine part of the pancreas, gastrin u, secretin, cholecystokinin and other gastrointestinal hormones in the digestive tract. Furthermore, it inhibits the secretion of gastric and pancreatic juice, the motility of the digestive tract and the absorption of nutrients in the small intestine. Somatostatin suppresses the feeling of hunger and probably also functions as a neurotransmitter in some parts of the brain.

Links

Related Articles

- Gastrointestinal Hormones Overview

References

- GANONG, William F. *Review of Medical Physiology*. 20. edition. Galen, 2005. 890 pp. ISBN 80-7262-311-7.
- ŠVÍGLEROVÁ, Jitka – SLAVÍKOVÁ, Jana. *Physiology of the gastrointestinal tract*. 1. edition. Karolinum, 2008. ISBN 9788024615264.