

Cat# **SP-89590-1**

Description: VIP (6-28) (human, bovine, porcine, rat) (AA: Phe-Thr-Asp-Asn-Tyr-Thr-Arg-Leu-Arg-Lys-Gln-Met-Ala-Val-Lys-Lys-Tyr-Leu-Asn-Ser-Ile-Leu-Asn-NH₂) (MW: 2816.35)

Size: 1 mg

Purity: >95%

Store: Desiccated at -20oC.

VIP (Vasoactive Intestinal Peptide), is a neuropeptide that belongs to a glucagon/secretin superfamily, the ligand of class II G protein-coupled receptors. VIP is produced in many tissues of vertebrates including the gut, pancreas, and suprachiasmatic nuclei of the hypothalamus in the brain. In humans, the vasoactive intestinal peptide is encoded by the VIP gene. The three-dimensional structure of VIP exhibits substantial similarities with those of other members of the VIP/glucagon family

Vasoactive intestinal peptide (VIP) is present in the peripheral and the central nervous systems where it functions as a nonadrenergic, noncholinergic neurotransmitter or neuromodulator. VIP has many functions, including relaxing certain muscles, triggering release of hormones from the pancreas, gut, and hypothalamus, and increasing the amount of water and electrolytes from the pancreas and gut. A huge number of biological effects have been attributed to VIP. With respect to the digestive system, VIP seems to induce smooth muscle relaxation (lower esophageal sphincter, stomach, gall bladder), stimulate secretion of water into pancreatic juice and bile, and cause inhibition of gastric acid secretion and absorption from the intestinal lumen. VIP stimulates contractility in the heart, causes vasodilation, increases glycogenolysis, lowers arterial blood pressure and relaxes the smooth muscle of trachea, stomach and gall bladder.

Certain tumors arising from the pancreatic islets or nervous tissue (called VIPomas) secrete excessive quantities of VIP, and are associated with chronic, watery diarrhea. VIP producing tumors (VIPomas) are rare; most (90%) are located in the pancreas. Watery diarrhea, hypokalemia, and achlorhydria are key symptoms.

Reference: Marko (2002) Pharmacology 66 206; Delago (2004) Pharmacological Reviews (56) 2: 249-290

For in vitro research use only

Related items:

Catalog#	ProdDescription
SP-101333-1	VIP-Lys(Biotin), human, porcine, rat (AA: His-Ser-Asp-Ala-Val-Phe-Thr-Asp-Asn-Tyr-Thr-Arg-Leu-Arg-Lys-Gln-Met-Ala-Val-Lys-Lys-Tyr-Leu-Asn-Ser-Ile-Leu-Asn-Lys(Biotin)) (MW: 3681.33)
SP-55232-1	VIP, guinea pig [H-His-Ser-Asp-Ala-Leu-Phe-Thr-Asp-Thr-Tyr-Thr-Arg-Leu-Arg-Lys-Gln-Met-Ala-Met-Lys-Lys-Tyr-Leu-Asn-Ser-Val-Leu-Asn-NH ₂ ; MW: 3344.93]
SP-69627-1	VIP, human, porcine, rat; VIP (28 amino acids) (AA: His-Ser-Asp-Ala-Val-Phe-Thr-Asp-Asn-Tyr-Thr-Arg-Leu-Arg-Lys-Gln-Met-Ala-Val-Lys-Lys-Tyr-Leu-Asn-Ser-Ile-Leu-Asn-NH ₂) (MW: 3225.7)
SP-86627-5	VIP (1 - 12), human, porcine, rat (AA: His-Ser-Asp-Ala-Val-Phe-Thr-Asp-Asn-Tyr-Thr-Arg) (MW: 1425.49)
SP-87444-5	VIP Receptor-Binding Inhibitor L-8-K (AA: Leu-Met-Tyr-Pro-Thr-Tyr-Leu-Lys) (MW: 1028.29)
SP-89590-1	VIP (6-28) (human, bovine, porcine, rat) (AA: Phe-Thr-Asp-Asn-Tyr-Thr-Arg-Leu-Arg-Lys-Gln-Met-Ala-Val-Lys-Lys-Tyr-Leu-Asn-Ser-Ile-Leu-Asn-NH ₂) (MW: 2816.35)
SP-89591-1	VIP (10-28) (human, bovine, porcine, rat) (AA: Tyr-Thr-Arg-Leu-Arg-Lys-Gln-Met-Ala-Val-Lys-Lys-Tyr-Leu-Asn-Ser-Ile-Leu-Asn-NH ₂) (MW: 2338.87)
SP-89594-1	VIP, Antagonist (AA: Lys-Pro-Arg-Arg-Pro-Tyr-Thr-Asp-Asn-Tyr-Thr-Arg-Leu-Arg-Lys-Gln-Met-Ala-Val-Lys-Lys-Tyr-Leu-Asn-Ser-Ile-Leu-Asn-NH ₂) (MW: 3467.13)

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