

Product Specification Sheet

Vasoactive Intestinal Peptides (VIP)

Cat. # VIP51-P	Human, Mouse, rat, VIP (1-28)	SIZE: 1 mg
Cat. # VIP61-P	Human, Mouse, rat, VIP (1-12)	SIZE: 1 mg
Cat. # VIP71-P	Human, Mouse, rat, VIP (10-28)	SIZE: 0.5 mg
Cat. # VIP81-P	Human, Mouse, rat, VIP (11-28)	SIZE: 0.5 mg

Vasoactive intestinal peptide (VIP) is a 28-amino acid peptide (human, chr 6q26-q27). Expressed and secreted by neurons innervating primary and secondary immune organs such as lymph nodes. VIP is a potent neurotrophic factor causes vasodilation, lowers arterial blood pressure, and relaxes the smooth muscle of trachea, stomach and gall bladder. VIP also modulates several T-lymphocyte activities including motility, cytokine production, proliferation and apoptosis, VIP exerts its biological activity by binding to two closely related class II G-protein-coupled receptors VPAC-1 and VPAC-2 beside this VIP has its own receptors **VIPR1&2** (Vasoactive Intestinal Polypeptide Receptor 1&2) and **VIPRRP** (VIP receptor-gene repressor protein). VIP shows similarities to glucagon, secretin and gastric inhibitory peptide (GIP) as such it has been considered a member of the glucagon-secretin family. The VIP is 100% conserved in mouse, rat and human. VIP is considered to be a viable candidate for the development of treatments for rheumatoid arthritis, since treatment with VIP significantly reduced incidence of severity of arthritis, the therapeutic effect of VIP was associated with downregulation of both inflammatory and autoimmune components of the disease.

Source of Antigen

Cat # VIP51-P (1-28)

Sequence:

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-NH₂

Mol Wt: 3325.7
Formula: C₁₄₇H₂₃₈N₄₄O₄₂S₁
Form: Powder
Solubility: Water (1 mg/ml)

Cat # VIP61-P (1-12)

Sequence:

His-Ser-Asp-Ala-Val-Phe-Thr-Asp-Asn-Tyr-Thr-Arg

Mol Wt: 1425.6
Formula: C₆₁H₈₈N₁₈O₂₂
Form: Powder
Solubility: Water (1 mg/ml)

Cat # VIP71-P (10-28)

Sequence:

Tyr-Thr-Arg-Leu-Arg-Lys-Gln-Met-Ala-Val-Lys-Lys-Tyr-Leu-Asn-Ser-Ile-Leu-Asn-NH₂

Mol Wt: 2339.1
Formula: C₁₀₅H₁₈₀N₃₂O₂₆S₁
Form: Powder
Solubility: Water (1 mg/ml)

Cat # VIP81-P (11-28)

Sequence:

Thr-Arg-Leu-Arg-Lys-Gln-Met-Ala-Val-Lys-Lys-Tyr-Leu-Asn-Ser-Ile-Leu-Asn-NH₂

Mol Wt: 2175.7
Formula: C₉₆H₁₇₁N₃₁O₂₄
Form: Powder
Solubility: Water (1 mg/ml)

Storage: Store powder at -20°C for up to 6 months.

After reconstitution in water, store solution in small aliquots at -20°C for 3-6 months. Do not freeze and thaw or store diluted solutions.

General References: (1) Lin Pei (1998) JBC, 273, 19902-19908; Lin Pei (2000) JBC, 275, 1176-1182; Bodner, M (1985) PNAS, 82, 3548-3551; Delgado, M (2001) Nature Med, 7, 563-568; Gotoh, E. (1998) Biochem. Int, 17, 555-562.

*This product is for In vitro research use only.

Related material available from ADI

Antibodies and Peptides: VIP, VIPR, VIPRRP, Glucagon, GLP.

VIP51-61-71-81-P 70313A

India Contact:

Life Technologies (India) Pvt. Ltd.

306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444
Email: customerservice@lifetechindia.com Website: www.lifetechindia.com