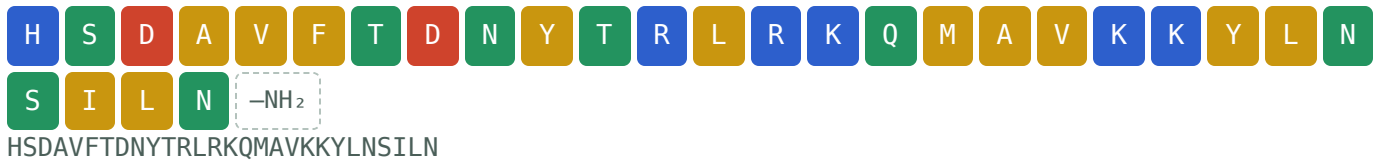


VIP (vasoactive intestinal peptide)

Vasoactive intestinal peptide (VIP) is a 28-amino-acid neuropeptide of the secretin-glucagon family that acts on VPAC1 and VPAC2 receptors. It regulates smooth muscle, secretion and immune function, and synthetic VIP (aviptadil) has been studied clinically.



■ Hydrophobic
 ■ Acidic
 ■ Basic
 ■ Polar
 ■ Gly, Pro, Cys
 ■ Non-standard

Length	28 residues
Formula	C ₁₄₇ H ₂₃₈ N ₄₄ O ₄₂ S
Average mass	3,325.80 g/mol
Monoisotopic mass	3,323.7561 Da
Evidence	Late-stage clinical trials
US status	Not FDA-approved for any use
WADA	Check the current Prohibited List

28 residues, C-terminal amide.

Expected ions (monoisotopic)

[M+H] ⁺	[M+2H] ²⁺	[M+3H] ³⁺	[M+4H] ⁴⁺
3,324.7634	1,662.8853	1,108.9260	831.9463

What the COA should show

A good certificate of analysis should confirm identity by mass spectrometry, with the observed mass matching the expected mass shown on this page for the C-terminally amidated sequence, and report HPLC purity with the chromatogram. Check for the C-terminal amide, since a free acid differs by about 1 Da. Methionine 17 oxidation gives a +16 Da species that should be looked for and reported. Asparagine and aspartate residues can deamidate or isomerize, producing closely eluting impurities. As a 28-residue synthetic peptide, deletion sequences are also possible. The salt form and net peptide content should be stated, and endotoxin results matter for cell and immune work.

Storage and stability

Store lyophilized VIP sealed at -20 °C or colder, protected from light, moisture and air, and equilibrate before opening. The methionine residue is oxidation-prone, so minimize air exposure and consider inert-gas purging for long-term storage. VIP adsorbs to surfaces and degrades quickly in biological matrices, so low-binding tubes and protease inhibitors may be useful in experiments. Aliquot solutions for frozen storage at -20 °C or below and avoid repeated freeze-thaw cycles.

Full entry, references and latest research: <https://peptidewiki.net/compounds/vip/>
For laboratory research reference only. Not medical advice; not for human or veterinary use.