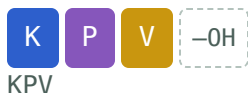


KPV

KPV is the tripeptide lysine-proline-valine, the C-terminal sequence of alpha-melanocyte-stimulating hormone. It is studied for anti-inflammatory effects in cell and rodent models, particularly of intestinal inflammation, and is not approved for any use.



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

Length	3 residues
Formula	C ₁₆ H ₃₀ N ₄ O ₄
Average mass	342.43 g/mol
Monoisotopic mass	342.2267 Da
Evidence	Preclinical (animal and cell studies)
US status	Not FDA-approved; PCAC recommended 503A listing (July 2026), FDA action pending
WADA	Check the current Prohibited List

C-terminal tripeptide of α -MSH (residues 11–13).

Expected ions (monoisotopic)

[M+H] ⁺	[M+2H] ²⁺	[M+3H] ³⁺	[M+4H] ⁴⁺
343.2340	172.1206	115.0828	86.5640

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, and report HPLC purity with the chromatogram. It should specify whether the material is the free acid or the C-terminal amide, since these differ by about 1 Da and may be hard to distinguish without high-resolution MS. Because the peptide is so small, counter-ions make up a large share of the powder, so the salt form and net peptide content are especially important. Very short, polar peptides can retain poorly on standard reverse-phase HPLC, so the method should be appropriate for the analyte.

Storage and stability

Store lyophilized KPV sealed at -20 °C, protected from moisture and light, and equilibrate to room temperature before opening; small salt-rich peptides can be hygroscopic. KPV lacks oxidation-prone residues, so it is relatively robust chemically. Prepare solutions in sterile water or buffer for lab use, refrigerate for short-term work, aliquot for frozen storage, and avoid repeated freeze-thaw cycles.