

Kisspeptin-10

Kisspeptin-10 is the C-terminal decapeptide of kisspeptin, the product of the KISS1 gene. It activates the kisspeptin receptor (KISS1R, also called GPR54) and is studied as a regulator of gonadotropin-releasing hormone and reproductive hormones.



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

Length	10 residues
Formula	$C_{63}H_{83}N_{17}O_{14}$
Average mass	1,302.44 g/mol
Monoisotopic mass	1,301.6305 Da
Evidence	Early clinical studies
US status	Not FDA-approved for any use
WADA	Check the current Prohibited List

Kisspeptin(112–121) amide.

Expected ions (monoisotopic)

$[M+H]^+$	$[M+2H]^{2+}$	$[M+3H]^{3+}$	$[M+4H]^{4+}$
1,302.6378	651.8225	434.8841	326.4149

What the COA should show

A kisspeptin-10 certificate of analysis should confirm identity by mass spectrometry against the expected mass shown on this page and report HPLC purity. The C-terminal amide is essential for activity; an acid-terminated variant differs by about 1 Da and should be excluded with high-resolution MS. Compound-specific degradation includes tryptophan oxidation and asparagine deamidation (+1 Da), which can be hard to resolve from the parent peak. The certificate should specify which kisspeptin form is supplied, since kisspeptin-10, -13, -14 and -54 are distinct compounds. Salt form and net peptide content should be stated.

Storage and stability

Store lyophilized kisspeptin-10 sealed at -20 °C or below, protected from light and moisture. The tryptophan residue is sensitive to light and oxidation, and the asparagines can deamidate in solution, particularly at neutral to basic pH and higher temperatures. Prepare solutions close to use, keep them cold, aliquot them and avoid repeated freeze-thaw cycles.

Full entry, references and latest research: <https://peptidewiki.net/compounds/kisspeptin-10/>
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