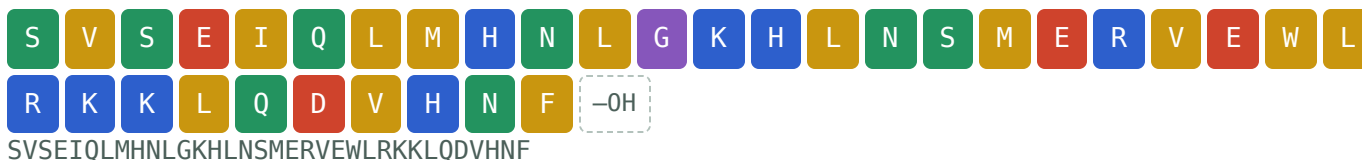


Teriparatide

Teriparatide is the N-terminal 34-amino-acid fragment of human parathyroid hormone, PTH(1-34). It is an FDA-approved bone-forming (anabolic) agent, marketed as Forteo, used for osteoporosis in people at high risk of fracture.



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

Length	34 residues
Formula	C ₁₈₁ H ₂₉₁ N ₅₅ O ₅₁ S ₂
Average mass	4,117.72 g/mol
Monoisotopic mass	4,115.1309 Da
Evidence	Approved drug
US status	FDA-approved (Forteo)
WADA	Check the current Prohibited List

Human PTH(1–34), free acid.

Expected ions (monoisotopic)

[M+H] ⁺	[M+2H] ²⁺	[M+3H] ³⁺	[M+4H] ⁴⁺
4,116.1382	2,058.5727	1,372.7176	1,029.7900

What the COA should show

A 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; peptide mapping adds confidence for a 34-residue sequence. Compound-specific degradation includes oxidation of Met8 and Met18, each adding about 16 Da and known to reduce receptor activity, tryptophan oxidation, and deamidation of asparagine residues. Truncated or extended forms, such as fragments lacking terminal residues, should be resolved. For recombinant material, host-cell protein and endotoxin testing are relevant. The counter-ion and net peptide content should be stated.

Storage and stability

Store lyophilized teriparatide sealed at -20 °C or colder, protected from light and moisture; pharmaceutical solutions are kept refrigerated and should not be frozen, per labeling. The two methionines make the peptide notably sensitive to oxidation, so minimize headspace air, avoid peroxide-containing excipients and consider inert-gas overlay. Prepare research solutions in sterile, slightly acidic buffer, keep them cold, aliquot for longer storage at -20 °C or below, and avoid repeated freeze-thaw cycles and vigorous agitation.

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