

Larazotide

Larazotide is a synthetic eight-amino-acid peptide studied as an oral regulator of intestinal tight junctions. It reached phase 3 testing in celiac disease but is not approved for any use.



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

Length	8 residues
Formula	$C_{32}H_{55}N_9O_{10}$
Average mass	725.83 g/mol
Monoisotopic mass	725.4072 Da
Evidence	Late-stage clinical trials
US status	Not FDA-approved for any use
WADA	Check the current Prohibited List

Linear octapeptide (AT-1001).

Expected ions (monoisotopic)

$[M+H]^+$	$[M+2H]^{2+}$	$[M+3H]^{3+}$	$[M+4H]^{4+}$
726.4145	363.7109	242.8097	182.3591

What the COA should show

A certificate of analysis should confirm identity by mass spectrometry against the expected mass shown on this page and report HPLC purity with the chromatogram. Because the sequence is short and contains repeated Val and Gly residues, deletion impurities (missing Gly or Val) can be close in retention time to the main peak, so a well-resolved method and MS confirmation of impurity peaks are useful. The single glutamine can deamidate (+1 Da). The counter-ion, usually acetate, and net peptide content should be reported.

Storage and stability

Store lyophilized larazotide sealed at -20 °C or colder, protected from moisture and light, and allow vials to reach room temperature before opening. The peptide lacks oxidation-prone residues, so the main concerns are moisture uptake and slow deamidation of glutamine in solution. Prepare solutions in sterile water or buffer for lab use, keep them refrigerated for short-term work, aliquot for longer storage, and avoid repeated freeze-thaw cycles.

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