

Peptide Reconstitution & Mixing Chart

Bacteriostatic water dosing reference for common research peptides · ACS Peptide Testing Labs · acslabtest.com

Mixing chart

Peptide vial	Bacteriostatic water	Final concentration	Per 0.1 mL (10 units)	Per 0.05 mL (5 units)
Semaglutide 5 mg	2 mL	2.5 mg/mL	250 mcg	125 mcg
Semaglutide 10 mg	2 mL	5 mg/mL	500 mcg	250 mcg
Semaglutide 10 mg	1 mL	10 mg/mL	1 mg	500 mcg
Tirzepatide 10 mg	2 mL	5 mg/mL	500 mcg	250 mcg
Tirzepatide 15 mg	3 mL	5 mg/mL	500 mcg	250 mcg
Tirzepatide 30 mg	3 mL	10 mg/mL	1 mg	500 mcg
Retatrutide 10 mg	2 mL	5 mg/mL	500 mcg	250 mcg
Retatrutide 20 mg	2 mL	10 mg/mL	1 mg	500 mcg
Cagrilintide 10 mg	2 mL	5 mg/mL	500 mcg	250 mcg
BPC-157 5 mg	2 mL	2.5 mg/mL	250 mcg	125 mcg
TB-500 5 mg	2 mL	2.5 mg/mL	250 mcg	125 mcg
Ipamorelin 5 mg	2 mL	2.5 mg/mL	250 mcg	125 mcg
CJC-1295 5 mg	2 mL	2.5 mg/mL	250 mcg	125 mcg
Tesamorelin 10 mg	2 mL	5 mg/mL	500 mcg	250 mcg
Sermorelin 5 mg	2 mL	2.5 mg/mL	250 mcg	125 mcg
GHK-Cu 50 mg	5 mL	10 mg/mL	1 mg	500 mcg
Melanotan II 10 mg	2 mL	5 mg/mL	500 mcg	250 mcg
PT-141 10 mg	2 mL	5 mg/mL	500 mcg	250 mcg

Formula: concentration (mg/mL) = vial strength (mg) ÷ diluent volume (mL). Dose per 0.1 mL = concentration ÷ 10. On a U-100 insulin syringe, 10 units = 0.1 mL.

Reconstitution technique

1. Bring vials to room temperature before mixing. Cold cake dissolves poorly.
2. Swab both rubber stoppers with fresh alcohol and let dry.
3. Draw the target volume of bacteriostatic water into a sterile syringe.
4. Insert the needle at an angle. Aim the stream at the glass wall, not the peptide cake.
5. Release the plunger slowly. Do not force water onto the powder.
6. Roll the vial between palms for 30-60 seconds. Do not shake.
7. Solution must be clear and colorless. Cloudy or particulate = discard.
8. Label with peptide, concentration, and reconstitution date. Refrigerate at 2-8°C.

Storage after reconstitution

Condition	Typical stability	Best use
Refrigerated 2-8°C	14-28 days	Active-use vials
Frozen -20°C	Several months	Aliquots, avoid freeze-thaw
Frozen -80°C	6-24 months	Long-term reserve

Safety notes

- Only USP-grade bacteriostatic water for injection (BWFI) or sterile water for injection (SWFI). Never tap or distilled water.
- Bacteriostatic water is good for 28 days refrigerated after first puncture.
- Some protocols require preservative-free diluent (SWFI). Check peptide compatibility with benzyl alcohol.
- Sterile diluent handles microbial risk. It does not verify peptide identity, purity, or endotoxin level - only independent HPLC and mass spec testing does.

Verify what's in the vial. ACS Peptide Testing Labs provides ISO 17025-accredited HPLC purity, mass spec identity, and endotoxin testing for research peptides shipped from anywhere in the US. Request a quote at acslabtest.com.

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