

PEPTIDE RECONSTITUTION CALCULATOR

The Complete Dosing + Mixing Reference



2026 Research Edition

Researched. Tested. Verified.

BAC WATER CALCULATOR TABLE

Concentration (mcg per 0.1ml / 10 IU draw) by vial size and BAC water volume

Use this table to find the exact concentration of your reconstituted peptide. Find your VIAL SIZE (mg) in the left column, then find the BAC WATER VOLUME (ml) across the top. The cell value = how many mcg you get per 0.1ml drawn on a standard U-100 insulin syringe.

FORMULA:

Concentration (mcg/0.1ml) = (Vial mg x 1,000) / BAC Water ml / 10

Example: 5mg vial + 2ml BAC = (5,000 / 2) / 10 = 250 mcg per 0.1ml

MASTER CONCENTRATION TABLE

VIAL SIZE	0.5ml BAC	1.0ml BAC	1.5ml BAC	2.0ml BAC	2.5ml BAC	3.0ml BAC	4.0ml BAC	5.0ml BAC
1mg vial	200 mcg	100 mcg	66.7 mcg	50 mcg	40 mcg	33.3 mcg	25 mcg	20 mcg
2mg vial	400 mcg	200 mcg	133.3 mcg	100 mcg	80 mcg	66.7 mcg	50 mcg	40 mcg
5mg vial	1000 mcg	500 mcg	333.3 mcg	250 mcg	200 mcg	166.7 mcg	125 mcg	100 mcg
10mg vial	2000 mcg	1000 mcg	666.7 mcg	500 mcg	400 mcg	333.3 mcg	250 mcg	200 mcg
15mg vial	3000 mcg	1500 mcg	1000 mcg	750 mcg	600 mcg	500 mcg	375 mcg	300 mcg
20mg vial	4000 mcg	2000 mcg	1333.3 mcg	1000 mcg	800 mcg	666.7 mcg	500 mcg	400 mcg



Highlighted cells = clean round-number doses (easiest to work with)

All values = mcg per 0.1ml draw using a standard U-100 insulin syringe

TIP: The most common setups use 1-2ml BAC water per 5mg vial = 50-100 IU doses

DOSE LOOKUP GRIDS - PART 1

Pre-calculated doses for BPC-157, TB-500, Semaglutide, Tirzepatide

BPC			
BPC-157			
Healing, gut repair, tendon repair			
Typical: 250-500mcg/day			
HOW MUCH TO DRAW?			
Using 5mg vial			
BAC WATER	125mcg dose	250mcg dose	500mcg dose
0.5ml	1 IU	2 IU	5 IU
1.0ml	2 IU	5 IU	10 IU
1.5ml	4 IU	8 IU	15 IU
2.0ml	5 IU	10 IU	20 IU
2.5ml	6 IU	12 IU	25 IU
3.0ml	8 IU	15 IU	30 IU

Most common: 5mg vial + 2ml BAC = 250mcg per 0.1ml draw

TB5			
TB-500			
Recovery, flexibility, wound healing			
Typical: 2-7.5mg/week			
HOW MUCH TO DRAW?			
Using 5mg vial			
BAC WATER	2mg dose	5mg dose	7.5mg dose
0.5ml	20 IU	50 IU	75 IU
1.0ml	40 IU	100 IU	---
1.5ml	60 IU	---	---
2.0ml	80 IU	---	---
2.5ml	100 IU	---	---
3.0ml	---	---	---

Most common: 5mg vial + 1ml BAC = 500mcg per 0.1ml draw

SEMA			
Semaglutide			
GLP-1 agonist, weight management			
Typical: 0.25-2mg/week			
HOW MUCH TO DRAW?			
Using 2mg vial			
BAC WATER	250mcg dose	500mcg dose	1mg dose
0.5ml	6 IU	12 IU	25 IU
1.0ml	12 IU	25 IU	50 IU
1.5ml	19 IU	38 IU	75 IU
2.0ml	25 IU	50 IU	100 IU
2.5ml	31 IU	62 IU	---
3.0ml	38 IU	75 IU	---

Most common: 2mg vial + 1ml BAC = 200mcg per 0.1ml draw

TIRZ			
Tirzepatide			
GIP/GLP-1 dual agonist, weight management			
Typical: 2.5-15mg/week			
HOW MUCH TO DRAW?			
Using 5mg vial			
BAC WATER	2.5mg dose	5mg dose	7.5mg dose
0.5ml	25 IU	50 IU	75 IU
1.0ml	50 IU	100 IU	---
1.5ml	75 IU	---	---
2.0ml	100 IU	---	---
2.5ml	---	---	---
3.0ml	---	---	---

Most common: 5mg vial + 1ml BAC = 500mcg per 0.1ml draw

HOW TO READ:

Find your BAC water volume in the left column. Find your target dose across the top. The cell = IU to draw on a U-100 syringe.

--- = not recommended at that BAC volume (requires drawing >100 IU or >1ml)

DOSE LOOKUP GRIDS - PART 2

Pre-calculated doses for PT-141, Ipamorelin, CJC-1295, Sermorelin

PT141

PT-141 (Bremelanotide)

Sexual function, libido

Typical: 1-2mg per use

HOW MUCH TO DRAW?

Using 10mg vial

BAC WATER	500mcg dose	1mg dose	2mg dose
0.5ml	2 IU	5 IU	10 IU
1.0ml	5 IU	10 IU	20 IU
1.5ml	8 IU	15 IU	30 IU
2.0ml	10 IU	20 IU	40 IU
2.5ml	12 IU	25 IU	50 IU
3.0ml	15 IU	30 IU	60 IU

Most common: 10mg vial + 2ml BAC = 500mcg per 0.1ml draw

IPA

Ipamorelin

GH secretagogue, sleep

Typical: 100-300mcg 2-3x/day

HOW MUCH TO DRAW?

Using 2mg vial

BAC WATER	100mcg dose	200mcg dose	300mcg dose
0.5ml	2 IU	5 IU	8 IU
1.0ml	5 IU	10 IU	15 IU
1.5ml	8 IU	15 IU	22 IU
2.0ml	10 IU	20 IU	30 IU
2.5ml	12 IU	25 IU	38 IU
3.0ml	15 IU	30 IU	45 IU

Most common: 2mg vial + 2ml BAC = 100mcg per 0.1ml draw

CJC

CJC-1295 (no DAC)

GH pulse amplifier, stack

Typical: 100-300mcg 2-3x/day

HOW MUCH TO DRAW?

Using 2mg vial

BAC WATER	100mcg dose	200mcg dose	300mcg dose
0.5ml	2 IU	5 IU	8 IU
1.0ml	5 IU	10 IU	15 IU
1.5ml	8 IU	15 IU	22 IU
2.0ml	10 IU	20 IU	30 IU
2.5ml	12 IU	25 IU	38 IU
3.0ml	15 IU	30 IU	45 IU

Most common: 2mg vial + 2ml BAC = 100mcg per 0.1ml draw

SERM

Sermorelin

GH releasing hormone analog

Typical: 100-300mcg nightly

HOW MUCH TO DRAW?

Using 3mg vial

BAC WATER	100mcg dose	200mcg dose	300mcg dose
0.5ml	2 IU	3 IU	5 IU
1.0ml	3 IU	7 IU	10 IU
1.5ml	5 IU	10 IU	15 IU
2.0ml	7 IU	13 IU	20 IU
2.5ml	8 IU	17 IU	25 IU
3.0ml	10 IU	20 IU	30 IU

Most common: 3mg vial + 3ml BAC = 100mcg per 0.1ml draw

STACK TIP:

Ipamorelin + CJC-1295 (no DAC) is the most popular GH stack. Use the same BAC volume and dose for both.

Inject simultaneously or within 10 minutes. Typical: 100-200mcg of each, 2-3x daily.

FILL-IN-YOUR-OWN CALCULATOR

Use this blank grid for any peptide not listed above

Use the formula below to calculate your own concentrations, then fill in the blank grid. Keep this page as your personal reconstitution reference.

- STEP 1:** Total mcg in vial = Vial mg x 1,000
STEP 2: Concentration (mcg/ml) = Total mcg / BAC Water ml
STEP 3: Draw volume (IU) = (Dose mcg / Concentration mcg/ml) x 100
QUICK: IU to draw = (Dose mcg / Total mcg) x BAC Water ml x 100

MY CUSTOM PEPTIDE LOOKUP TABLE

PEPTIDE NAME: _____		VIAL SIZE: _____ mg			
TARGET DOSES (fill in mcg):		_____ mcg	_____ mcg	_____ mcg	_____ mcg

BAC WATER (ml)	DOSE COL 1 1 IU to draw	DOSE COL 2 2 IU to draw	DOSE COL 3 3 IU to draw	DOSE COL 4 4 IU to draw	DOSE COL 5 5 IU to draw
0.5ml	_____	_____	_____	_____	_____
1.0ml	_____	_____	_____	_____	_____
1.5ml	_____	_____	_____	_____	_____
2.0ml	_____	_____	_____	_____	_____
2.5ml	_____	_____	_____	_____	_____
3.0ml	_____	_____	_____	_____	_____

PRINT TIP: Print multiple copies of this page to track different peptides or protocol cycles.
Store completed sheets with your reconstituted vials so doses are always at hand.

RECONSTITUTION QUICK REFERENCE

Step-by-step mixing guide + essential reminders

GATHER SUPPLIES

01

Peptide vial (lyophilized powder), bacteriostatic water (BAC), alcohol swabs, U-100 insulin syringe.
Never use sterile water - BAC water prevents bacterial growth in multi-use vials.

SWAB BOTH STOPPERS

02

Wipe the rubber stopper of your peptide vial AND the BAC water vial with a fresh alcohol swab.
Allow to air dry 10 seconds. Never blow on the stopper to dry it.

DRAW BAC WATER

03

Insert syringe into BAC water vial and draw the desired volume. Refer to the tables in this guide.
Tip: draw slightly more than needed, then push back excess to ensure accuracy.

INJECT SLOWLY - ANGLE

04

Insert needle into peptide vial at a 45-degree angle. Let the BAC water run slowly DOWN THE SIDE of the vial.
Never spray directly onto the powder - this can break peptide bonds and reduce potency.

SWIRL - NEVER SHAKE

05

Gently swirl the vial in a slow circular motion until the powder fully dissolves. This takes 30-60 seconds.
Shaking creates bubbles and can denature the peptide. If cloudy after swirling, the powder may not be fully dissolved.

INSPECT THE SOLUTION

06

The reconstituted solution should be clear and colorless. Slight tint is normal for some peptides.
Discard immediately if: cloudy after swirling, particulate visible, strong odor, or unusual color.

LABEL + REFRIGERATE

07

Label vial with: peptide name, reconstitution date, concentration (mcg/ml), and your initials.
Store at 2-8 degrees C. Use within 28-42 days. Never freeze a reconstituted peptide.

STORAGE QUICK REFERENCE

STATE	SHORT-TERM	LONG-TERM / NOTES	MAX SHELF LIFE
Lyophilized (powder)	Room temp (short-term)	Fridge (long-term)	Up to 24 months
Reconstituted (liquid)	MUST refrigerate 2-8C	Never freeze	28-42 days