

RESEARCH PEPTIDE

H A N D B O O K

MIXING • STORAGE • LABORATORY REFERENCE •
UNIT CONVERSION CHARTS



COMPLETE MIXING INSTRUCTIONS
Step-by-step reconstitution guide



UNIT CONVERSION CHARTS
U100 insulin syringe reference



STORAGE & HANDLING
Best practices for stability
and integrity



**PROFESSIONAL
LABORATORY
REFERENCE**

VERSION 1.0



**FOR RESEARCH
PURPOSES ONLY**

NOT INTENDED FOR HUMAN CONSUMPTION.
Not for use in diagnostic procedures,
therapeutic applications, or as a food,
drug, or cosmetic.

WELCOME

TO THE RESEARCH PEPTIDE HANDBOOK



This handbook was created as a comprehensive laboratory reference for researchers seeking a standardized guide for peptide handling, reconstitution procedures, concentration calculations, unit conversions, and proper storage practices.

Our goal is to promote consistency, accuracy, and best practices in laboratory research environments.



INSIDE YOU'LL FIND:



PROPER STORAGE

Guidelines for optimal stability and integrity.



STERILE HANDLING

Best practices for maintaining a clean research environment.



MIXING PROCEDURES

Step-by-step reconstitution instructions.



U100 SYRINGE CONVERSIONS

Detailed unit reference and visual guides.



CONCENTRATION FORMULAS

Simple calculations for accurate dosing and research.



QUICK REFERENCE CHARTS

At-a-glance conversion tables.



INDIVIDUAL PEPTIDE GUIDES

Complete information for each peptide covered in this book.



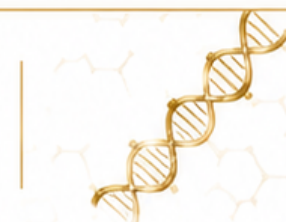
LABORATORY SAFETY

Important notes and handling considerations.



IMPORTANT REMINDER

This handbook is intended strictly as a laboratory and mathematical reference. It is not medical advice and does not promote the use of any substance for human or veterinary purposes.



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“ Consistency in technique yields consistency in results. ”



NAVIGATION TIP

Use bookmarks or the thumbnails panel in your PDF viewer to navigate quickly to any section.

SYMBOL LEGEND

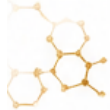
- ★ Best Practice
- ⚠ Important Note



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RESEARCH LABORATORY BEST PRACTICES



Peptides are sensitive compounds that require proper handling and storage to maintain their stability and integrity. Following best laboratory practices ensures consistent and reliable results.



GENERAL PRINCIPLES



INSPECT BEFORE USE

Always inspect the vial for any cracks, leaks, or visible particles. Do not use if seal is broken or solution (after reconstitution) appears cloudy or discolored.



MAINTAIN STERILE TECHNIQUE

Use a clean workspace and sterile techniques at all times. Contamination is the leading cause of peptide degradation.



AVOID CONTAMINATING THE STOPPER

Always use alcohol prep pads and allow the stopper to air dry before puncturing. Do not touch the stopper after cleaning.



NEVER REUSE NEEDLES OR SYRINGES

Always use a new sterile needle and syringe for each puncture. This prevents contamination and preserves peptide quality.



NEVER SHAKE LYOPHILIZED PEPTIDES

Shaking can denature peptide chains. Always swirl gently until fully dissolved.



INJECT DILUENT SLOWLY

Inject bacteriostatic water slowly down the side of the vial to minimize foaming and preserve peptide structure.



AVOID TEMPERATURE FLUCTUATIONS

Repeated warming and cooling can degrade peptides. Store consistently at the recommended temperature.



STORE PROPERLY AFTER RECONSTITUTION

Refrigerate immediately after mixing. Proper storage is essential for maintaining potency.



PRO TIP

Most peptide degradation occurs from improper handling—not age.



Refrigerate after mixing at 2–8°C (36–46°F).



Keep vials and solutions protected from direct light.



Use reconstituted peptides within the recommended time frame.



Label all vials with peptide name, concentration, and date of mixing.



Discard if cloudy, discolored, or if particles are present.



IMPORTANT

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NOT FOR
THERAPEUTIC USE



NOT FOR
FOOD OR DRUG USE

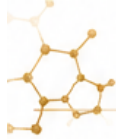


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EQUIPMENT CHECKLIST



Having the proper equipment ensures safe handling, accurate reconstitution, and reliable results. Use high-quality sterile supplies designed for laboratory research.



01

LYOPHILIZED PEPTIDE VIAL



Ensure the vial is sealed and intact. Store as recommended until use.

02

BACTERIOSTATIC WATER (BAC WATER)



Used for reconstitution. Ensure solution is clear and sealed.

03

ALCOHOL PREP PADS



Used to disinfect vial stoppers, syringes, and work surfaces.

04

U100 INSULIN SYRINGES



For accurate dosing. U100 syringes are calibrated in 1-unit increments.

05

LARGER SYRINGE (3–10 mL)



Used to draw bacteriostatic water for mixing.

06

TRANSFER NEEDLE (18–20G)



Used to transfer bacteriostatic water into the peptide vial minimizing coring.

07

NITRILE GLOVES



Protects both the researcher and the research materials from contamination.

08

REFRIGERATED STORAGE



Maintain 2–8°C (36–46°F) for reconstituted peptides.

09

SHARPS CONTAINER



Dispose of used needles, syringes, and glass vials safely in a designated sharps container.



QUALITY MATTERS

Always use sterile, high-quality supplies. Substandard equipment can compromise results and increase the risk of contamination.



REMEMBER:

Clean equipment + sterile technique + proper storage = reliable research results.



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STERILE TECHNIQUE



Proper sterile technique minimizes the risk of contamination and helps ensure the stability and integrity of your peptide solutions. Follow these steps every time you reconstitute.



STEP-BY-STEP PROCESS

01			WASH YOUR HANDS Thoroughly wash your hands with soap and water for at least 20 seconds before beginning.
02			DISINFECT YOUR WORKSPACE Clean your work area with 70% isopropyl alcohol and allow it to air dry.
03			CLEAN THE VIAL STOPPERS Use an alcohol prep pad to wipe the rubber stopper of both the peptide vial and the BAC water vial. Allow to dry.
04			DRAW BACTERIOSTATIC WATER Use a sterile syringe and draw the required amount of BAC water.
05			INJECT SLOWLY Insert the needle into the peptide vial, aiming it against the side of the glass. Inject the water slowly to minimize foaming.
06			SWIRL GENTLY Gently swirl the vial until the peptide is fully dissolved. Do NOT shake.
07			INSPECT THE SOLUTION Ensure the solution is clear and free of particles. Do not use if cloudy or discolored.
08			STORE PROPERLY Place the reconstituted peptide in the refrigerator immediately.



BEST PRACTICES



Always use sterile supplies and clean technique.



Work quickly but carefully to minimize exposure.



Keep vials cold before and after reconstitution.



Protect solutions from light whenever possible.



Label vials with peptide name, concentration, and date mixed.



COMMON MISTAKES TO AVOID



Shaking the vial



Injecting water directly onto the peptide cake



Using non-sterile or contaminated equipment



Touching the needle to any non-sterile surface



Leaving vials at room temperature for extended periods



REMEMBER

Sterile technique is the most important factor in maintaining the purity and effectiveness of your peptide solutions.



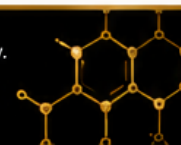
A clean process today ensures reliable results tomorrow.



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UNDERSTANDING U100 INSULIN SYRINGES



U100 insulin syringes are calibrated to deliver 100 units in 1 milliliter (mL) of solution. This makes them the most accurate tool for measuring and administering precise peptide doses in small volumes.

U100 UNIT CONVERSIONS

UNITS	VOLUME (mL)	PERCENTAGE (%)
100 Units	1.00 mL	100%
90 Units	0.90 mL	90%
80 Units	0.80 mL	80%
70 Units	0.70 mL	70%
60 Units	0.60 mL	60%
50 Units	0.50 mL	50%
40 Units	0.40 mL	40%
30 Units	0.30 mL	30%
25 Units	0.25 mL	25%
20 Units	0.20 mL	20%
15 Units	0.15 mL	15%
10 Units	0.10 mL	10%
5 Units	0.05 mL	5%
2 Units	0.02 mL	2%
1 Unit	0.01 mL	1%



IMPORTANT NOTES

- Ensure the syringe is free of air bubbles before dosing.
- Always read the meniscus at eye level.
- Use a new sterile syringe for each use.
- Do not use syringes that are damaged or have worn markings.

100 Units
= 1.00 mL

75 Units
= 0.75 mL

50 Units
= 0.50 mL

25 Units
= 0.25 mL

10 Units
= 0.10 mL

5 Units
= 0.05 mL

1 Unit
= 0.01 mL

CAP

Remove cap carefully without touching the needle.

NEEDLE

Typically 29G–31G for subcutaneous injections.

BARREL

Calibrated to hold 100 units (1 mL) of solution.



KEY POINT

Every line on the syringe represents 2 units.

Every long line represents 10 units.

PLUNGER

Draw back to desired unit line. Push forward to deliver solution.

FINGER REST

Provides stability and control for accurate dosing.

100 UNITS = 1.00 mL
1 UNIT = 0.01 mL

READING THE MENISCUS



Always read the meniscus (the curved liquid surface) at **EYE LEVEL** for the most accurate reading.



CORRECT

Read at eye level.



TOO HIGH

Reading above eye level will give a lower dose.



TOO LOW

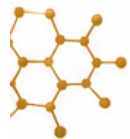
Reading below eye level will give a higher dose.



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STORAGE GUIDELINES



Proper storage is essential for maintaining the stability, potency, and purity of your research peptides.

Follow these guidelines before and after reconstitution to ensure reliable results.



BEFORE RECONSTITUTION



Store lyophilized peptides in a cool, dry place away from direct sunlight and heat sources.



Ideally store at 2–8°C (36–46°F) in a refrigerator. This helps maintain peptide stability over time.



Do not freeze lyophilized peptides unless specifically instructed by the manufacturer.



Keep vials tightly sealed with original stoppers and caps to prevent moisture absorption.



Minimize exposure to air and humidity by keeping vials in their sealed packaging until ready to use.



Check the expiration date and use within the recommended time frame.



AFTER RECONSTITUTION



Store reconstituted peptides in the refrigerator at 2–8°C (36–46°F).



Protect from light by using amber vials or storing vials in their original packaging.



Avoid repeated temperature fluctuations. Do not leave peptides at room temperature longer than necessary.



Inspect the solution before each use. If discoloration, cloudiness, or particles are present, do not use for research.



Use within the recommended time frame (typically 28–60 days depending on the peptide and storage conditions).



Discard any remaining solution after the recommended period or if contamination is suspected.



OPTIMAL STORAGE ENVIRONMENT



TEMPERATURE
2–8°C
(36–46°F)



HUMIDITY
Low
(Dry Environment)



LIGHT
Low
(Protect from light)



AIR EXPOSURE
Minimal
(Keep sealed)

CONSISTENT • COOL • DRY • DARK



STORAGE BEST PRACTICES



Keep a dedicated area in your refrigerator for peptides.



Do not store peptides in the refrigerator door.



Keep away from food, beverages, and chemicals.



Label all vials with peptide name, concentration, and date mixed.



Be consistent with storage and handling procedures.



CAUTION

Improper storage can lead to peptide degradation, loss of potency, and unreliable experimental results.



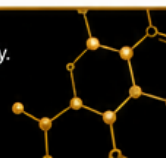
When in doubt, throw it out. Safety and accuracy come first.

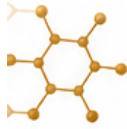


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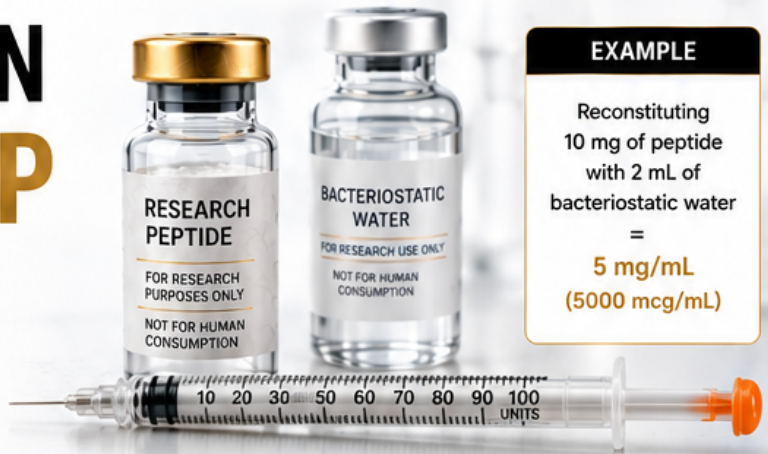




RECONSTITUTION STEP-BY-STEP



Proper reconstitution is critical for achieving accurate concentrations and maintaining peptide integrity. Follow these steps for best results.



EXAMPLE

Reconstituting
10 mg of peptide
with 2 mL of
bacteriostatic water
=
5 mg/mL
(5000 mcg/mL)

01 PREPARE YOUR WORK AREA



Clean your work area with 70% isopropyl alcohol. Gather all necessary supplies.

02 CLEAN THE STOPPERS



Use an alcohol prep pad to clean the rubber stopper of the peptide vial and the bacteriostatic water vial. Allow to air dry.

03 DRAW BACTERIOSTATIC WATER



Using a sterile syringe, draw the desired amount of bacteriostatic water (based on your calculation).

04 INJECT WATER INTO VIAL



Insert the needle into the peptide vial, aiming the water against the side of the glass. Slowly inject the water down the side.

05 SWIRL GENTLY



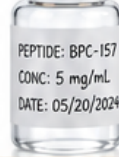
Gently swirl the vial until the peptide is completely dissolved. Do not shake. Shaking can damage the peptide structure.

06 INSPECT THE SOLUTION



Ensure the solution is clear and free of particles. Do not use if cloudy, discolored, or if particles are present.

07 LABEL THE VIAL



Label the vial with peptide name, concentration, date reconstituted, and any other relevant notes.

08 STORE PROPERLY



Store the reconstituted peptide in the refrigerator at 2–8°C (36–46°F) immediately.

RECONSTITUTION GUIDELINES



CALCULATE ACCURATELY

Always calculate the amount of bacteriostatic water needed to achieve your desired concentration.



USE STERILE SUPPLIES

Use only sterile syringes, needles, and bacteriostatic water.



AVOID FOAMING

Inject water slowly down the side of the vial to minimize foaming.



WORK EFFICIENTLY

Peptides are sensitive to time, light, and temperature. Work quickly and return to storage.



RECONSTITUTION TIPS



Use the minimum amount of bacteriostatic water necessary to achieve your desired concentration.



If a vacuum is present in the vial, it will equalize as you inject the water—this is normal.



Some peptides may take a few minutes to fully dissolve. Patience is key.



If using multiple vials, reconstitute one at a time.



Follow specific peptide instructions if provided by the supplier.



IMPORTANT: RECONSTITUTE CORRECTLY. CALCULATE ACCURATELY. STORE PROPERLY.

These three steps ensure the stability, potency, and reliability of your research peptides.

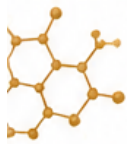


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DOSING CALCULATIONS



Accurate dosing starts with accurate calculations. Use this guide to determine how much bacteriostatic water to add and how much solution to inject to achieve your desired peptide dose.



FORMULA

$$\frac{\text{Desired Dose (mg)}}{\text{Peptide Strength (mg/mL)}} = \text{Volume to Inject (mL)}$$

$$\text{Peptide Strength (mg/mL)} = \frac{\text{Peptide Amount (mg)}}{\text{Total Reconstitution Volume (mL)}}$$



EXAMPLE CALCULATIONS

	EXAMPLE 1 Reconstituting 10 mg peptide with 2 mL bacteriostatic water	EXAMPLE 2 Reconstituting 15 mg peptide with 3 mL bacteriostatic water	
Total Peptide	10 mg	15 mg	
Total Volume	2 mL	3 mL	
Peptide Strength	10 mg ÷ 2 mL = 5 mg/mL	15 mg ÷ 3 mL = 5 mg/mL	
DESIRED DOSE	VOLUME TO INJECT	DESIRED DOSE	VOLUME TO INJECT
1.0 mg	0.20 mL	1.0 mg	0.20 mL
2.5 mg	0.50 mL	2.5 mg	0.50 mL
5.0 mg	1.00 mL	5.0 mg	1.00 mL
7.5 mg	1.50 mL	7.5 mg	1.50 mL
10.0 mg	2.00 mL	10.0 mg	2.00 mL



TIP: Always double-check your math and start with a lower dose to assess tolerance and response.



HOW TO CALCULATE

- Know Your Peptide Amount**
Check the label for the total amount of peptide in the vial (mg).
- Add Bacteriostatic Water**
Decide how much bacteriostatic water (mL) you will add to reconstitute the peptide.
- Calculate Peptide Strength**
Peptide Strength (mg/mL) = Peptide Amount (mg) ÷ Total Volume (mL)
- Calculate Volume to Inject**
Volume to Inject (mL) = Desired Dose (mg) ÷ Peptide Strength (mg/mL)
- Measure and Inject**
Use the calculated volume to draw and inject your desired dose.



QUICK REFERENCE CHART

PEPTIDE STRENGTH: 5 mg/mL

DESIRED DOSE (mg)	VOLUME TO INJECT (mL)
0.5 mg	0.10 mL
1.0 mg	0.20 mL
1.5 mg	0.30 mL
2.0 mg	0.40 mL
2.5 mg	0.50 mL
5.0 mg	1.00 mL
7.5 mg	1.50 mL
10.0 mg	2.00 mL



IMPORTANT: Peptide concentrations and dosing requirements vary. Always consult reliable research and supplier guidelines.



**ACCURATE CALCULATIONS
SAFE RESEARCH
RELIABLE RESULTS**

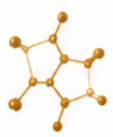


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INJECTION TECHNIQUE



Proper injection technique helps ensure accuracy, minimizes discomfort, and reduces the risk of irritation or infection. Follow these steps for safe and effective administration.



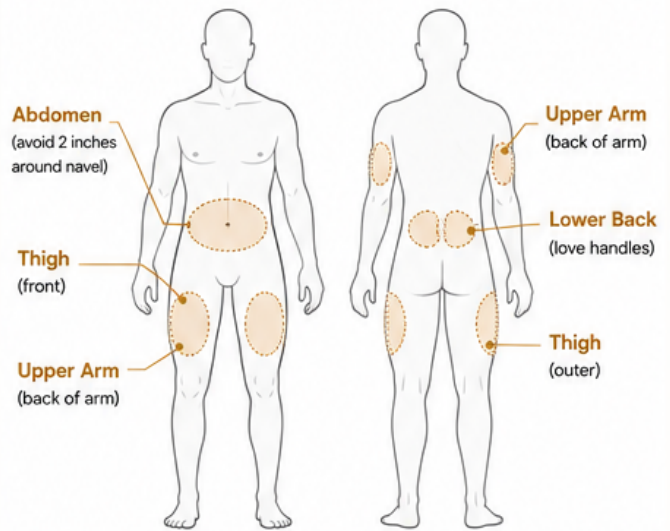
STEP-BY-STEP INJECTION PROCESS

01		CLEAN THE AREA Clean the injection site with an alcohol prep pad. Allow the skin to air dry completely.
02		PREPARE THE SYRINGE Draw your calculated dose into the syringe. Tap gently to remove air bubbles and expel any excess air.
03		PINCH THE SKIN Gently pinch a fold of skin between your thumb and forefinger.
04		INSERT THE NEEDLE Insert the needle at a 45–90° angle into the subcutaneous tissue.
05		INJECT SLOWLY Press the plunger slowly and steadily to deliver the solution.
06		WITHDRAW NEEDLE Remove the needle at the same angle it was inserted.
07		APPLY GENTLE PRESSURE Use a clean gauze or cotton pad. Do not rub the area. Dispose of the syringe in an approved sharps container.



RECOMMENDED INJECTION SITES

Rotate injection sites to minimize irritation.



NOTE: Subcutaneous injections are recommended for most research peptides. Do not inject into muscle or veins.



INJECTION TIPS

- ✓ Use a new sterile syringe and needle for every injection.
- ✓ Do not reuse needles or share supplies.
- ✓ Rotate injection sites to prevent irritation and tissue damage.
- ✓ Inject slowly to reduce discomfort.
- ✓ Stay relaxed and take deep breaths.
- ✓ If you experience redness or irritation, apply a cold compress.
- ✓ Follow the specific instructions provided with your peptide.



IMPORTANT NOTES



Always use sterile supplies and follow proper hygiene.



Keep track of injection sites, doses, and dates.



Dispose of needles and syringes in a sharps container.



Store peptides properly before and after reconstitution.



Monitor your body's response and adjust only as directed by your protocol.



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RETATRUTIDE

20 MG



OVERVIEW



PEPTIDE CLASS: Multi-Agonist Peptide



RESEARCH CATEGORY: Metabolic / Weight Management



MOLECULAR TARGET: GIPR, GLP-1R, GCGR



LABORATORY USES: For research purposes only.
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SUPPLIED AS

20 mg

Lyophilized Powder



RECONSTITUTION

Add

2 mL

Bacteriostatic Water



FINAL CONCENTRATION

10 mg/mL



CONVERSION

1 mg = 10 Units

(on U100 Syringe)



STORAGE



BEFORE MIXING

- Store in freezer
- -20°C (-4°F)
- Keep in original vial
- Protect from light
- Keep dry

AFTER MIXING

- Store in refrigerator
- 2°C – 8°C (36°F – 46°F)
- Do not freeze
- Use within 28 days
- Protect from light

LIGHT PROTECTION

- Keep away from direct light
- Use amber vials or wrap in foil
- Light can degrade peptide potency



TIP: Always plan ahead and double-check your calculations. Proper planning ensures accurate dosing, safer experiments, and more reliable results.



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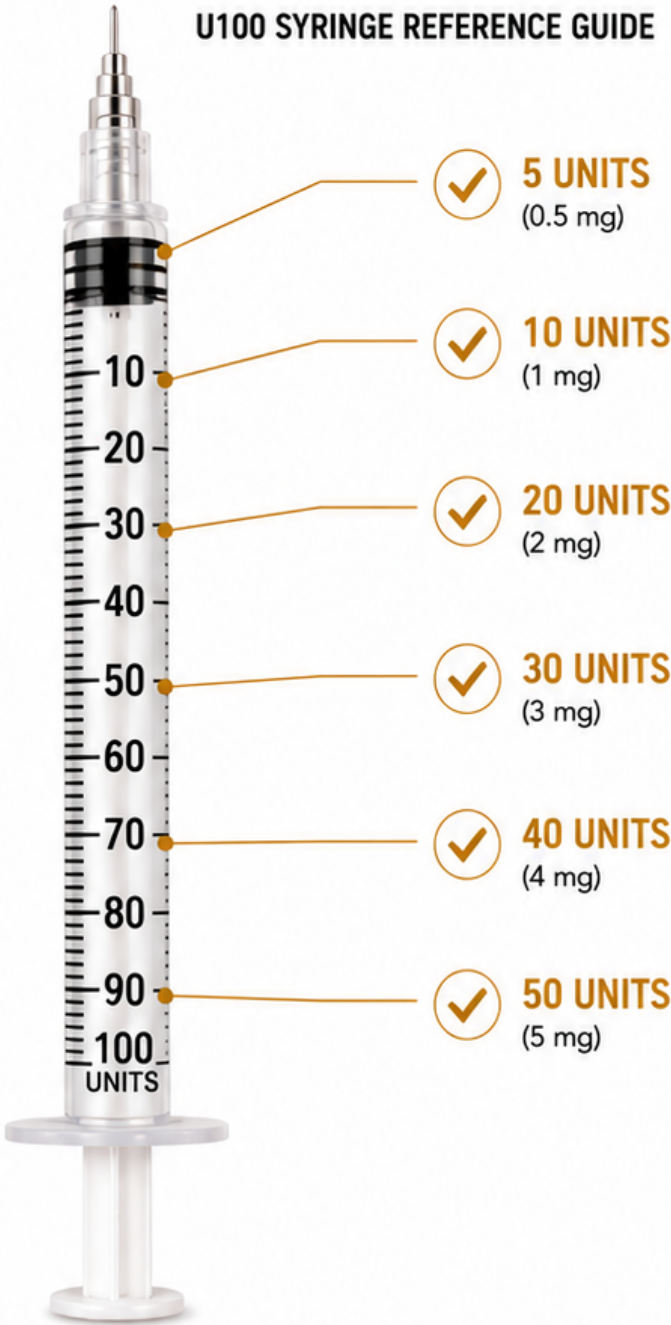
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RETATRUTIDE 20 MG

UNIT CONVERSION CHART

DOSE (mg)	UNITS (on U100 Syringe)
0.5	5
1	10
1.5	15
2	20
2.5	25
3	30
3.5	35
4	40
5	50
6	60
7	70
8	80
9	90
10	100



QUICK MATH

0.5 mg	=	5 Units	2 mg	=	20 Units
1 mg	=	10 Units	5 mg	=	50 Units



REMEMBER:

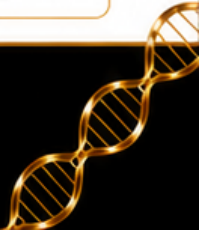
1 mg = 10 Units
Always use an U100 syringe.



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BPC-157

BODY PROTECTION COMPOUND



OVERVIEW

**PEPTIDE CLASS:**

Regulatory Peptide

**RESEARCH CATEGORY:**

Tissue Repair & Recovery

**MOLECULAR TARGET:**

VEGF, FGF, eNOS Pathways

**LABORATORY USES:**

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Not for human consumption.

**SUPPLIED AS****10 mg**

Lyophilized Powder

**RECONSTITUTION**

Add

2 mL

Bacteriostatic Water

**FINAL CONCENTRATION****5 mg/mL****CONVERSION****1 mg = 10 Units**

(on U100 Syringe)

**STORAGE****BEFORE MIXING**

- Store in freezer
- -20°C (-4°F)
- Keep in original vial
- Protect from light
- Keep dry

AFTER MIXING

- Store in refrigerator
- 2°C – 8°C (36°F – 46°F)
- Do not freeze
- Use within 28 days
- Protect from light

LIGHT PROTECTION

- Keep away from direct light
- Use amber vials or wrap in foil
- Light can degrade peptide potency



TIP: BPC-157 is highly stable when stored properly. Always minimize temperature changes and protect from light to maintain potency.

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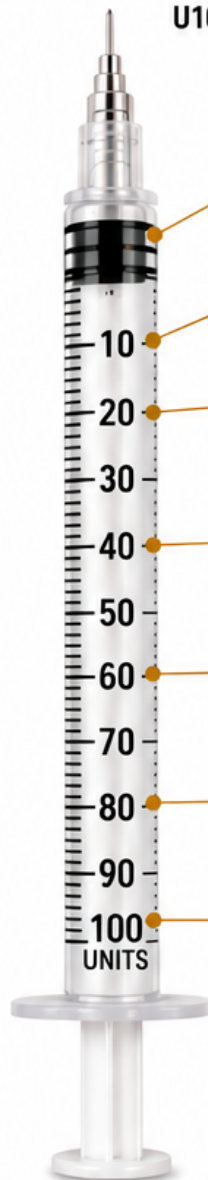


BPC-157 10 MG

UNIT CONVERSION CHART

DOSE (mg)	UNITS (on U100 Syringe)
0.1	1
0.2	2
0.3	3
0.4	4
0.5	5
0.6	6
0.7	7
0.8	8
0.9	9
1	10
1.5	15
2	20
2.5	25
3	30
4	40
5	50

U100 SYRINGE REFERENCE GUIDE



1 UNIT
(0.1 mg)



5 UNITS
(0.5 mg)



10 UNITS
(1 mg)



20 UNITS
(2 mg)



30 UNITS
(3 mg)



40 UNITS
(4 mg)



50 UNITS
(5 mg)



Always use a U100 syringe for accurate dosing.



QUICK MATH

0.1 mg = 1 Unit

0.5 mg = 5 Units

1 mg = 10 Units

2 mg = 20 Units

3 mg = 30 Units

5 mg = 50 Units



REMEMBER:

- 1 mg = 10 Units
- Double the mg, double the units
- Half the mg, half the units



PRO TIP: Consistency in measurement leads to consistency in results.
Always double-check your calculations before preparing your dose.



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TB-500

THYMOSIN BETA-4 FRAGMENT



OVERVIEW

**PEPTIDE CLASS:**

Regulatory Peptide

**RESEARCH CATEGORY:**

Tissue Repair & Recovery

**MOLECULAR TARGET:**

Actin Modulation

**LABORATORY USES:**For research purposes only.
Not for human consumption.**SUPPLIED AS****10 mg**

Lyophilized Powder

**RECONSTITUTION**

Add

2 mL

Bacteriostatic Water

**FINAL CONCENTRATION****5 mg/mL****CONVERSION****1 mg = 10 Units**

(on U100 Syringe)

**STORAGE****BEFORE MIXING**

- Store in freezer
- -20°C (-4°F)
- Keep in original vial
- Protect from light
- Keep dry

AFTER MIXING

- Store in refrigerator
- 2°C – 8°C (36°F – 46°F)
- Do not freeze
- Use within 28 days
- Protect from light

LIGHT PROTECTION

- Keep away from direct light
- Use amber vials or wrap in foil
- Light can degrade peptide potency

**TIP:** TB-500 is best handled with sterile technique.

Always minimize temperature fluctuations and protect from light.

**FOR RESEARCH PURPOSES ONLY**

Not intended for human consumption.



This information is for laboratory research reference only. Not intended to diagnose, treat, cure, or prevent any disease.

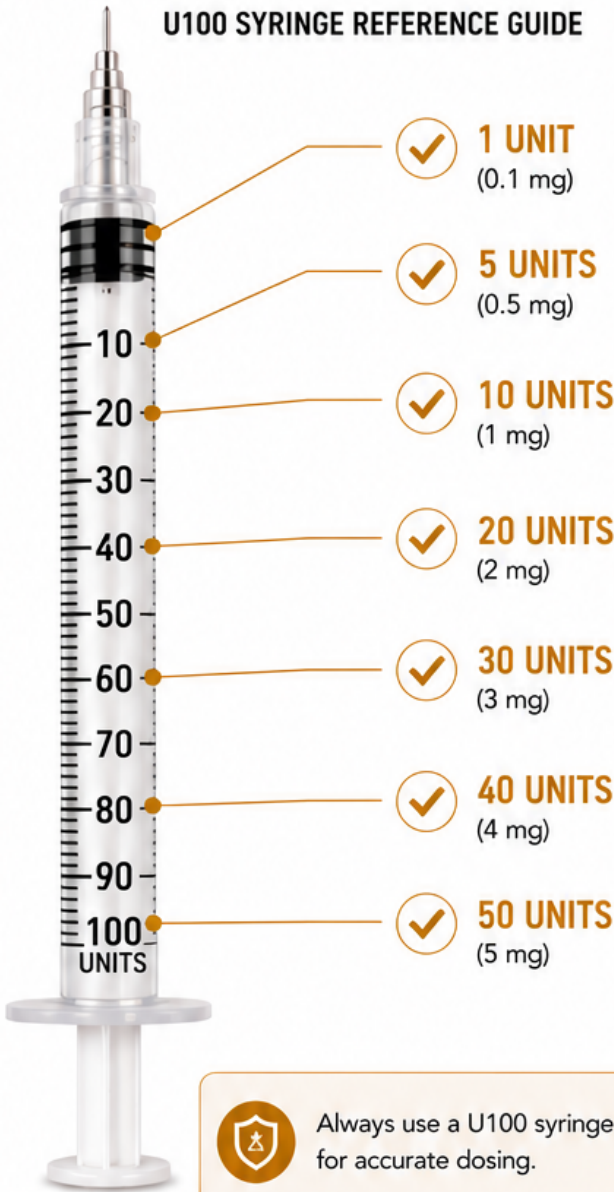


TB-500 10 MG

UNIT CONVERSION CHART

DOSE (mg)	UNITS (on U100 Syringe)
0.1	1
0.2	2
0.3	3
0.4	4
0.5	5
0.6	6
0.7	7
0.8	8
0.9	9
1	10
1.5	15
2	20
2.5	25
3	30
4	40
5	50

U100 SYRINGE REFERENCE GUIDE



Always use a U100 syringe for accurate dosing.



QUICK MATH

0.1 mg = 1 Unit	2 mg = 20 Units
0.5 mg = 5 Units	3 mg = 30 Units
1 mg = 10 Units	5 mg = 50 Units



REMEMBER:

- 1 mg = 10 Units
- Double the mg, double the units
- Half the mg, half the units



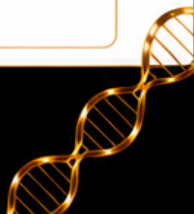
PRO TIP: Accuracy and consistency are key to reliable research results. Always double-check your calculations before preparing your dose.



FOR RESEARCH PURPOSES ONLY
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MOTS-C

MITOCHONDRIAL ORIGIN
PEPTIDE OF THE SHORT CHAIN-C



OVERVIEW



PEPTIDE CLASS:

Regulatory Peptide



RESEARCH CATEGORY:

Metabolic Health &
Energy Regulation



MOLECULAR TARGET:

AMPK Activation,
Mitochondrial Function



LABORATORY USES:

For research purposes only.
Not for human consumption.



SUPPLIED AS

10 mg
Lyophilized Powder



RECONSTITUTION

Add
2 mL
Bacteriostatic Water



FINAL CONCENTRATION

5 mg/mL



CONVERSION

1 mg = 10 Units
(on U100 Syringe)



STORAGE

Store reconstituted solution in refrigerator.
Use within 28 days.



BEFORE MIXING

- Store in freezer
- -20°C (-4°F)
- Keep in original vial
- Protect from light
- Keep dry

AFTER MIXING

- Store in refrigerator
- 2°C – 8°C (36°F – 46°F)
- Do not freeze
- Use within 28 days
- Protect from light

LIGHT PROTECTION

- Keep away from direct light
- Use amber vials or wrap in foil
- Light can degrade peptide potency



TIP: MOTS-C is light sensitive and should be protected from light at all times.
Proper storage and sterile technique are essential for stability and accuracy.



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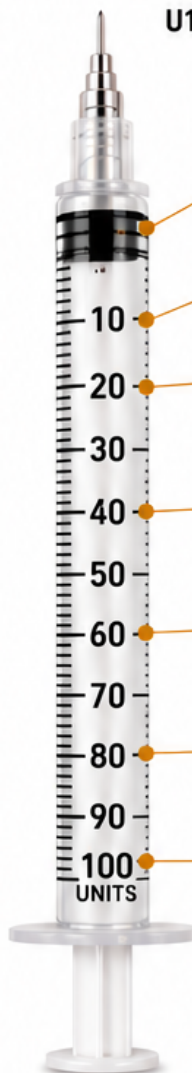
MOTS-C 10 MG

UNIT CONVERSION CHART

DOSE (mg)	UNITS (on U100 Syringe)
0.1	1
0.2	2
0.3	3
0.4	4
0.5	5
0.6	6
0.7	7
0.8	8
0.9	9
1	10
1.5	15
2	20
2.5	25
3	30
4	40
5	50

* Based on final concentration of 5 mg/mL

U100 SYRINGE REFERENCE GUIDE



✓ **1 UNIT**
(0.1 mg)

✓ **5 UNITS**
(0.5 mg)

✓ **10 UNITS**
(1 mg)

✓ **20 UNITS**
(2 mg)

✓ **30 UNITS**
(3 mg)

✓ **40 UNITS**
(4 mg)

✓ **50 UNITS**
(5 mg)



Always use a U100 syringe for accurate dosing.



QUICK MATH

0.1 mg = 1 Unit

0.5 mg = 5 Units

1 mg = 10 Units

2 mg = 20 Units

3 mg = 30 Units

5 mg = 50 Units



REMEMBER:

- 1 mg = 10 Units
- Double the mg, double the units
- Half the mg, half the units



KEY REMINDERS



STERILE TECHNIQUE

Use sterile syringe, needle, and bacteriostatic water. Maintain a clean environment at all times.



CONSTITUTED SOLUTION STABILITY

Store in refrigerator (2°C – 8°C) and use within 28 days. Do not freeze.



LIGHT SENSITIVITY

MOTS-C is light sensitive. Store in amber vials or wrap in foil.



RECORD KEEPING

Document lot number, date reconstituted, concentration, and dosing calculations.



PRO TIP: Consistency and accuracy in dosing and storage are critical for reliable research results. Always double-check your calculations and labels before use.



FOR RESEARCH PURPOSES ONLY
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NAD⁺ 500 MG

NICOTINAMIDE ADENINE DINUCLEOTIDE



OVERVIEW



PEPTIDE CLASS:

Nucleotide Coenzyme
(Vitamin B3 Derivative)



RESEARCH CATEGORY:

Cellular Energy, DNA Repair,
Longevity & Metabolic Research



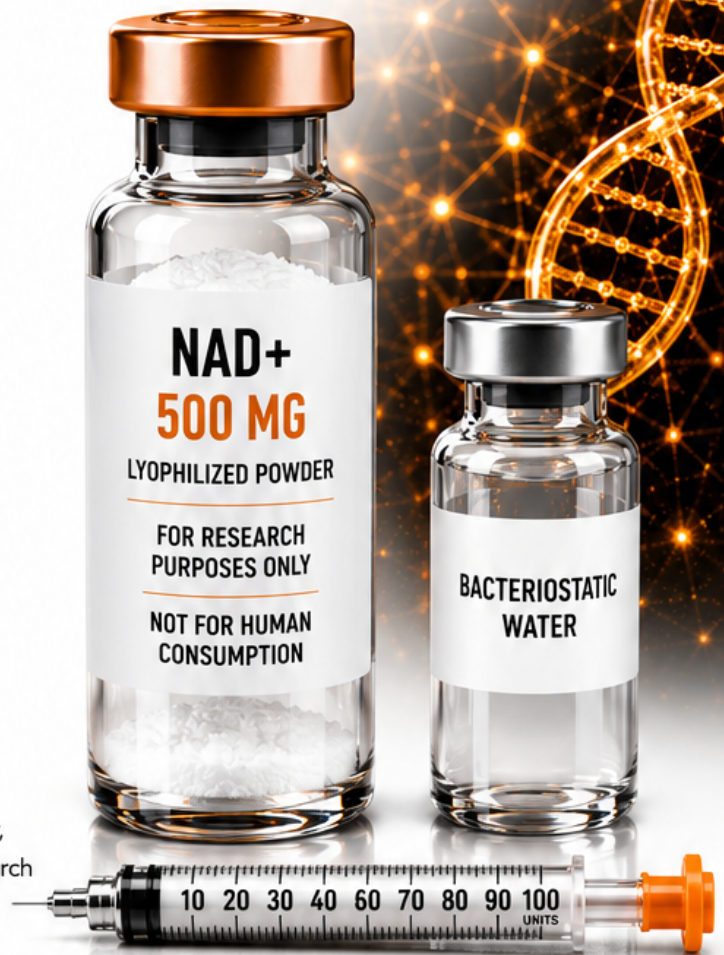
MOLECULAR TARGET:

Supports NAD⁺ Levels,
Sirtuins, PARPs, and Mitochondria



LABORATORY USES:

For research purposes only.
Not for human consumption.



SUPPLIED AS

500 mg
Lyophilized Powder



RECONSTITUTION

Add
10 mL
Bacteriostatic Water



FINAL CONCENTRATION

50 mg/mL
(50,000 mcg/mL)



CONVERSION

5 mg = 10 Units
(on U100 Syringe)
1 Unit = 0.5 mg



STORAGE

Store reconstituted solution in refrigerator (2°C – 8°C).
Use within 28 days. Do not freeze.



BEFORE MIXING

- Store in freezer
- -20°C (-4°F)
- Keep in original vial
- Protect from light
- Keep dry

AFTER MIXING

- Store in refrigerator
- 2°C – 8°C (36°F – 46°F)
- Do not freeze
- Use within 28 days
- Protect from light

LIGHT PROTECTION

- Keep away from direct light
- Use amber vials or wrap in foil
- Light can degrade peptide potency



TIP: NAD⁺ is sensitive to heat and light.
Proper storage and sterile technique are essential for stability and accuracy.



FOR RESEARCH PURPOSES ONLY
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research reference only. Not intended
to diagnose, treat, cure, or prevent
any disease.



NAD+ 500 MG

UNIT CONVERSION & DOSING GUIDE

RECONSTITUTION SUMMARY		
	SUPPLIED AS	500 mg Lyophilized Powder
	ADD	10 mL Bacteriostatic Water
	FINAL CONCENTRATION	50 mg/mL (50,000 mcg/mL)
	CONVERSION	5 mg = 10 Units (on U100 Syringe) 1 Unit = 0.5 mg
	STORAGE	Refrigerate (2°C – 8°C) Use within 28 days. Do not freeze.



U100 SYRINGE REFERENCE GUIDE

SYRINGE UNITS	DOSE (MG)
10 Units	5 mg
20 Units	10 mg
30 Units	15 mg
40 Units	20 mg
50 Units	25 mg
60 Units	30 mg
70 Units	35 mg
80 Units	40 mg
90 Units	45 mg
100 Units	50 mg



Always use a U100 syringe for accurate dosing.

UNIT CONVERSION CHART (50 mg/mL)

DOSE (MG)	MCG	UNITS	DOSE (MG)	MCG	UNITS
5 mg	5,000 mcg	10 Units	30 mg	30,000 mcg	60 Units
10 mg	10,000 mcg	20 Units	35 mg	35,000 mcg	70 Units
15 mg	15,000 mcg	30 Units	40 mg	40,000 mcg	80 Units
20 mg	20,000 mcg	40 Units	45 mg	45,000 mcg	90 Units
25 mg	25,000 mcg	50 Units	50 mg	50,000 mcg	100 Units

QUICK MATH (50 mg/mL)



- 5 mg = 10 Units
 - 10 mg = 20 Units
 - 15 mg = 30 Units
 - 20 mg = 40 Units
 - 25 mg = 50 Units
 - 30 mg = 60 Units
 - 50 mg = 100 Units
- 1 Unit = 0.5 mg**
10 Units = 5 mg



DOSING NOTES

- Start low and titrate based on research protocol.
- Common dosing range: 250 mg – 500 mg per week (50 – 100 Units). Split into 2–3 injections per week as needed.
- Consistent dosing and timing are key for research outcomes.
- Monitor body response and adjust accordingly.
- Dosage ranges vary by individual research design.



KEY REMINDERS



STERILE TECHNIQUE

Use sterile syringe, needle, and bacteriostatic water. Maintain a clean environment at all times.



CONSTITUTED SOLUTION STABILITY

Store in refrigerator (2°C – 8°C) and use within 28 days. Do not freeze.



LIGHT SENSITIVITY

NAD+ is sensitive to light. Store in amber vials or wrap in foil. Keep away from direct light.



RECORD KEEPING

Document lot number, date reconstituted, concentration, and dosing calculations.



CONSISTENCY

Consistent research protocols produce more reliable results.



ABOUT NAD+

NAD+ (Nicotinamide Adenine Dinucleotide) is a vital coenzyme involved in cellular energy production, DNA repair, and metabolic processes. It plays a key role in healthy aging and overall cellular function.



IMPORTANT

This product is sold strictly for laboratory research purposes only. Not for human consumption. Not for therapeutic use.

COMMON RESEARCH AREAS



Cellular Energy & Metabolism



DNA Repair & Longevity



Mitochondrial Function



FOR RESEARCH PURPOSES ONLY
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CJC-1295 /IPA

GROWTH HORMONE RELEASING HORMONE ANALOG



OVERVIEW



PEPTIDE CLASS:

Growth Hormone Releasing Hormone (GHRH) Analog



RESEARCH CATEGORY:

Hormonal Regulation & Growth Factor Research



MOLECULAR TARGET:

Pituitary GHRH Receptor
(Stimulates GH Secretion)



LABORATORY USES:

For research purposes only.
Not for human consumption.



SUPPLIED AS

2 mg

Lyophilized Powder



RECONSTITUTION

Add

2 mL

Bacteriostatic Water



FINAL CONCENTRATION

1 mg/mL

(1000 mcg/mL)



CONVERSION

100 mcg = 10 Units

(on U100 Syringe)



STORAGE

Store reconstituted solution in refrigerator (2°C – 8°C).

Use within 28 days. Do not freeze.



BEFORE MIXING

- Store in freezer
- -20°C (-4°F)
- Keep in original vial
- Protect from light
- Keep dry

AFTER MIXING

- Store in refrigerator
- 2°C – 8°C (36°F – 46°F)
- Do not freeze
- Use within 28 days
- Protect from light

LIGHT PROTECTION

- Keep away from direct light
- Use amber vials or wrap in foil
- Light can degrade peptide potency



TIP: CJC-1295/IPA is sensitive to heat and light.

Proper storage and sterile technique are essential for stability and accuracy.



FOR RESEARCH PURPOSES ONLY

Not intended for human consumption.



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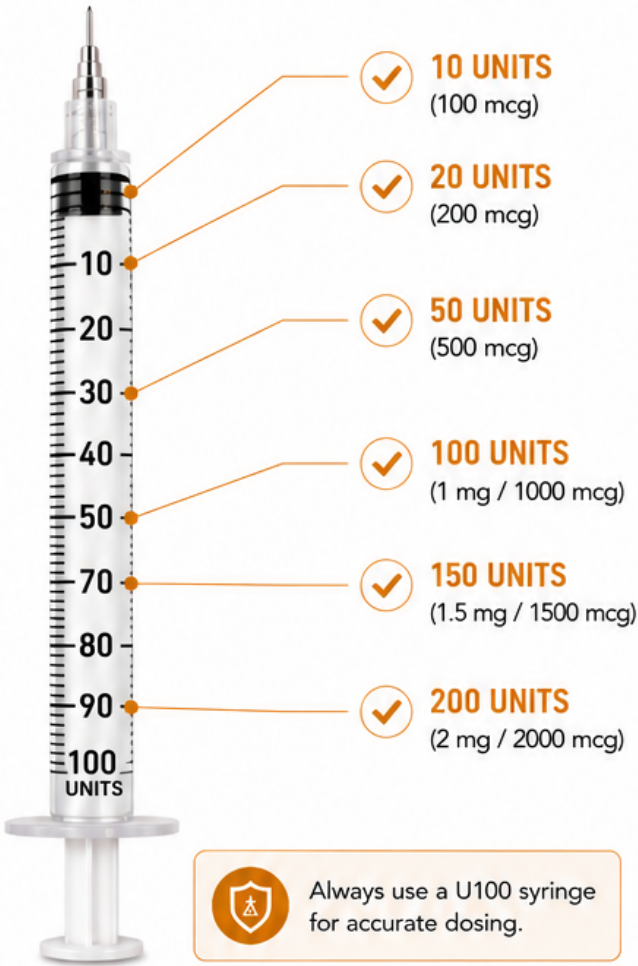
CJC-1295/IPA 2 MG

UNIT CONVERSION CHART

DOSE (mcg)	UNITS (on U100 Syringe)
100 mcg	10 Units
200 mcg	20 Units
300 mcg	30 Units
400 mcg	40 Units
500 mcg	50 Units
600 mcg	60 Units
700 mcg	70 Units
800 mcg	80 Units
900 mcg	90 Units
1000 mcg (1 mg)	100 Units
1200 mcg	120 Units
1500 mcg	150 Units
2000 mcg (2 mg)	200 Units

* Based on final concentration of 1 mg/mL (1000 mcg/mL)

U100 SYRINGE REFERENCE GUIDE



QUICK MATH

100 mcg = 10 Units	1250 mcg = 125 Units
250 mcg = 25 Units	1500 mcg = 150 Units
500 mcg = 50 Units	1750 mcg = 175 Units
750 mcg = 75 Units	2000 mcg = 200 Units
1000 mcg = 100 Units	



REMEMBER:

- 1000 mcg = 1 mg = 100 Units
- Double the mcg, double the units
- Half the mcg, half the units
- Dose accurately for consistent results



KEY REMINDERS



STERILE TECHNIQUE

Use sterile syringe, needle, and bacteriostatic water. Maintain a clean environment at all times.



CONSTITUTED SOLUTION STABILITY

Store in refrigerator (2°C – 8°C) and use within 28 days. Do not freeze.



LIGHT SENSITIVITY

CJC-1295/IPA is light sensitive. Store in amber vials or wrap in foil. Keep away from direct light.



RECORD KEEPING

Document lot number, date reconstituted, concentration, and dosing calculations.



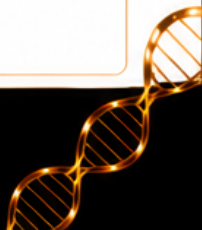
PRO TIP: CJC-1295/IPA is best used consistently for research protocols. Accurate dosing and proper storage are critical for peptide stability and reliable results.



FOR RESEARCH PURPOSES ONLY
Not intended for human consumption.



This information is for laboratory research reference only. Not intended to diagnose, treat, cure, or prevent any disease.





TESAMORELIN

10 MG

GROWTH HORMONE RELEASING
HORMONE (GHRH) ANALOG



OVERVIEW

**PEPTIDE CLASS:**

Growth Hormone Releasing
Hormone (GHRH) Analog

**RESEARCH CATEGORY:**

Hormonal Regulation &
Growth Factor Research

**MOLECULAR TARGET:**

Stimulates Pituitary GHRH
Receptors to Increase GH Release

**LABORATORY USES:**

For research purposes only.
Not for human consumption.

**SUPPLIED AS**

10 mg

Lyophilized Powder

**RECONSTITUTION**

Add

2 mL

Bacteriostatic Water

**FINAL CONCENTRATION**

5 mg/mL

(5000 mcg/mL)

**CONVERSION**

50 mcg = 10 Units

(on U100 Syringe)

**STORAGE**

Store reconstituted solution in refrigerator (2°C – 8°C).

Use within 28 days. Do not freeze.

**BEFORE MIXING**

- Store in freezer
- -20°C (-4°F)
- Keep in original vial
- Protect from light
- Keep dry

AFTER MIXING

- Store in refrigerator
- 2°C – 8°C (36°F – 46°F)
- Do not freeze
- Use within 28 days
- Protect from light

LIGHT PROTECTION

- Keep away from direct light
- Use amber vials or wrap in foil
- Light can degrade peptide potency



TIP: Tesamorelin is sensitive to heat and light.

Proper storage and sterile technique are essential for stability and accuracy.



FOR RESEARCH PURPOSES ONLY

Not intended for human consumption.



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research reference only. Not intended
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any disease.



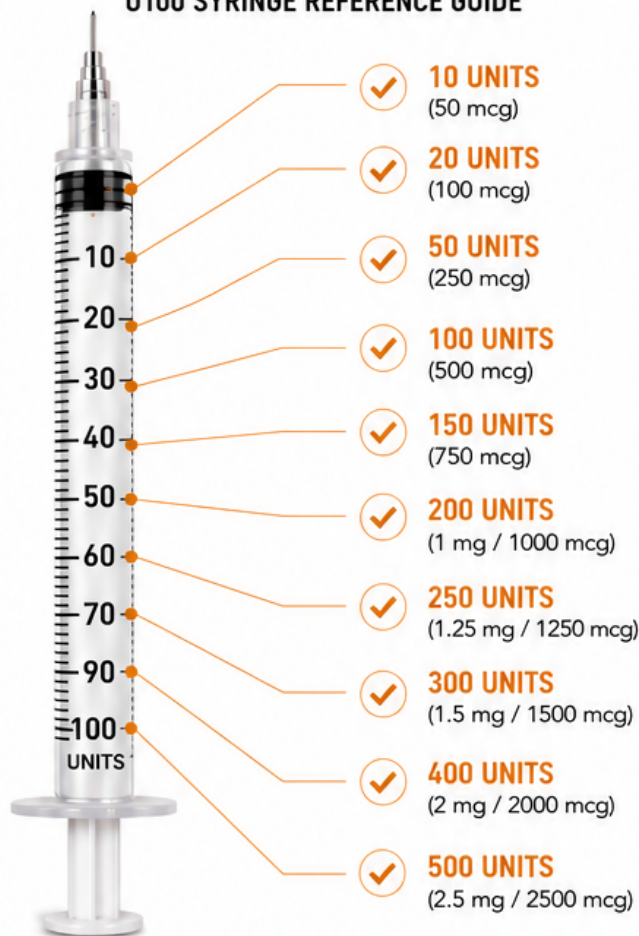
TESAMORELIN 10 MG

UNIT CONVERSION CHART

DOSE (mcg)	UNITS (on U100 Syringe)
50 mcg	10 Units
100 mcg	20 Units
150 mcg	30 Units
200 mcg	40 Units
250 mcg	50 Units
300 mcg	60 Units
350 mcg	70 Units
400 mcg	80 Units
450 mcg	90 Units
500 mcg	100 Units
750 mcg	150 Units
1000 mcg (1 mg)	200 Units
1250 mcg	250 Units
1500 mcg	300 Units
1750 mcg	350 Units
2000 mcg (2 mg)	400 Units
2500 mcg	500 Units

* Based on final concentration of 5 mg/mL (5000 mcg/mL)

U100 SYRINGE REFERENCE GUIDE



Always use a U100 syringe for accurate dosing.



QUICK MATH

50 mcg = 10 Units	1000 mcg = 200 Units
100 mcg = 20 Units	1250 mcg = 250 Units
250 mcg = 50 Units	1500 mcg = 300 Units
500 mcg = 100 Units	2000 mcg = 400 Units
750 mcg = 150 Units	2500 mcg = 500 Units



REMEMBER:

- 1000 mcg = 1 mg = 200 Units
- Double the mcg, double the units
- Half the mcg, half the units
- Dose accurately for consistent research results



KEY REMINDERS



STERILE TECHNIQUE

Use sterile syringe, needle, and bacteriostatic water. Maintain a clean environment at all times.



CONSTITUTED SOLUTION STABILITY

Store in refrigerator (2°C – 8°C) and use within 28 days. Do not freeze.



LIGHT SENSITIVITY

Tesamorelin is light sensitive. Store in amber vials or wrap in foil. Keep away from direct light.



RECORD KEEPING

Document lot number, date reconstituted, concentration, and dosing calculations.



PRO TIP: Consistent timing and accurate dosing are key for stable laboratory results. Proper storage preserves peptide potency and reliability.



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RETATRUTIDE

30 MG

NEXT-GEN MULTI-AGONIST PEPTIDE

GIPR • GLP-1R • GCGR

Glucose-Dependent Insulinotropic Polypeptide
/ Glucagon-Like Peptide-1 / Glucagon Receptor

OVERVIEW



PEPTIDE CLASS:

Multi-agonist peptide targeting
GIPR, GLP-1R, and GCGR



RESEARCH CATEGORY:

Metabolic Regulation,
Appetite Control &
Weight Management
Research



MOLECULAR TARGETS:

GIP Receptor, GLP-1 Receptor,
Glucagon Receptor



LABORATORY USES:

For research purposes only.
Not for human consumption.



SUPPLIED AS

30 mg

Lyophilized Powder



RECONSTITUTION

Add

2 mL

Bacteriostatic Water



FINAL CONCENTRATION

15 mg/mL

(15,000 mcg/mL)



CONVERSION

150 mcg = 10 Units

(on U100 Syringe)



STORAGE

Store reconstituted solution in refrigerator (2°C – 8°C).
Use within 28 days. Do not freeze.



BEFORE MIXING

- Store in freezer
- -20°C (-4°F)
- Keep in original vial
- Protect from light
- Keep dry

AFTER MIXING

- Store in refrigerator
- 2°C – 8°C (36°F – 46°F)
- Do not freeze
- Use within 28 days
- Protect from light

LIGHT PROTECTION

- Keep away from direct light
- Use amber vials or wrap in foil
- Light can degrade peptide potency



TIP: Retatrutide is sensitive to heat and light.

Proper storage and sterile technique are essential for stability and accuracy.



FOR RESEARCH PURPOSES ONLY

Not intended for human consumption.



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any disease.





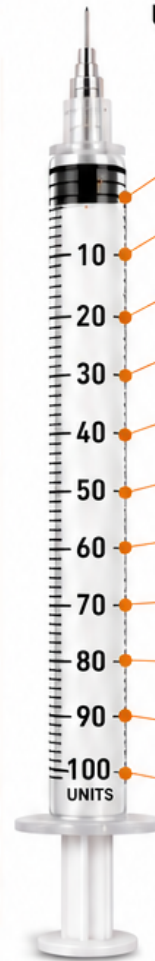
RETATRUTIDE 30 MG

UNIT CONVERSION CHART

DOSE (mg)	DOSE (mcg)	UNITS (on U100 Syringe)
0.5 mg	500 mcg	3.3 Units
1 mg	1,000 mcg	6.7 Units
1.5 mg	1,500 mcg	10 Units
2 mg	2,000 mcg	13.3 Units
2.5 mg	2,500 mcg	16.7 Units
3 mg	3,000 mcg	20 Units
3.5 mg	3,500 mcg	23.3 Units
4 mg	4,000 mcg	26.7 Units
4.5 mg	4,500 mcg	30 Units
5 mg	5,000 mcg	33.3 Units
6 mg	6,000 mcg	40 Units
7.5 mg	7,500 mcg	50 Units
10 mg	10,000 mcg	66.7 Units
12.5 mg	12,500 mcg	83.3 Units
15 mg	15,000 mcg	100 Units

* Based on final concentration of 15 mg/mL (15,000 mcg/mL)

U100 SYRINGE REFERENCE GUIDE



- ✓ **3.3 UNITS**
(0.5 mg / 500 mcg)
- ✓ **6.7 UNITS**
(1 mg / 1000 mcg)
- ✓ **10 UNITS**
(1.5 mg / 1500 mcg)
- ✓ **13.3 UNITS**
(2 mg / 2000 mcg)
- ✓ **20 UNITS**
(3 mg / 3000 mcg)
- ✓ **26.7 UNITS**
(4 mg / 4000 mcg)
- ✓ **33.3 UNITS**
(5 mg / 5000 mcg)
- ✓ **40 UNITS**
(6 mg / 6000 mcg)
- ✓ **50 UNITS**
(7.5 mg / 7500 mcg)
- ✓ **66.7 UNITS**
(10 mg / 10,000 mcg)
- ✓ **83.3 UNITS**
(12.5 mg / 12,500 mcg)
- 100 UNITS**



Always use a U100 syringe for accurate dosing.



QUICK MATH (15 mg/mL)

1 mg = 6.7 Units	7.5 mg = 50 Units
2 mg = 13.3 Units	10 mg = 66.7 Units
3 mg = 20 Units	12.5 mg = 83.3 Units
5 mg = 33.3 Units	15 mg = 100 Units



DOSING NOTES

- Start low and titrate based on research protocol.
- Consistent dosing and timing are key.
- Monitor body response and adjust accordingly.
- Dosage ranges vary by individual research design.

KEY REMINDERS



STERILE TECHNIQUE

Use sterile syringe, needle, and bacteriostatic water. Maintain a clean environment at all times.



CONSTITUTED SOLUTION STABILITY

Store in refrigerator (2°C – 8°C) and use within 28 days. Do not freeze.



LIGHT SENSITIVITY

Retatrutide is light sensitive. Store in amber vials or wrap in foil. Keep away from direct light.



RECORD KEEPING

Document lot number, date reconstituted, concentration, and dosing calculations.



CONSISTENCY

Consistent research protocols produce more reliable results.



ABOUT RETATRUTIDE

Retatrutide is a next-generation multi-agonist peptide that targets GIPR, GLP-1R, and GCGR receptors. It is being studied for its potential effects on glucose regulation, appetite control, and weight management.



IMPORTANT

This product is sold strictly for laboratory research purposes only. Not for human consumption. Not for therapeutic use.

COMMON RESEARCH AREAS



Metabolic Regulation



Weight Management Research



Glucose Homeostasis Studies



FOR RESEARCH PURPOSES ONLY

Not intended for human consumption.



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