GHK-Cu

About

GHK-Cu is a naturally occurring copper peptide studied for its potential to support skin repair, reduce inflammation, and promote healthy aging. It plays a key role in tissue regeneration, collagen production, and cellular protection. GHK-Cu has been shown to modulate the expression of over 4,000 genes, primarily in ways that support tissue repair, anti-inflammation, antioxidant defense, and anti-aging processes.

celia
GHK-cu
SKIN & HAIR
Injection USP
Copper Peptide 50mg
10 mL Multi Dose Vial

What's Included

- One vial, concentration: 50mg/4mL
- One vial will last 6 weeks

Reconstitution kit

- (20) 29-30G subq needles
- (1) 5mL syringe
- (1) 25G needle with syringe
- (1) 10 mL bacteriostatic water

Clinical Research Potential Benefits:

- May support wound healing and tissue repair
- May promote skin rejuvenation and anti-aging effects
- May help reduce inflammation
- May support hair growth and scalp health
- May provide antioxidant and DNA-protective effects
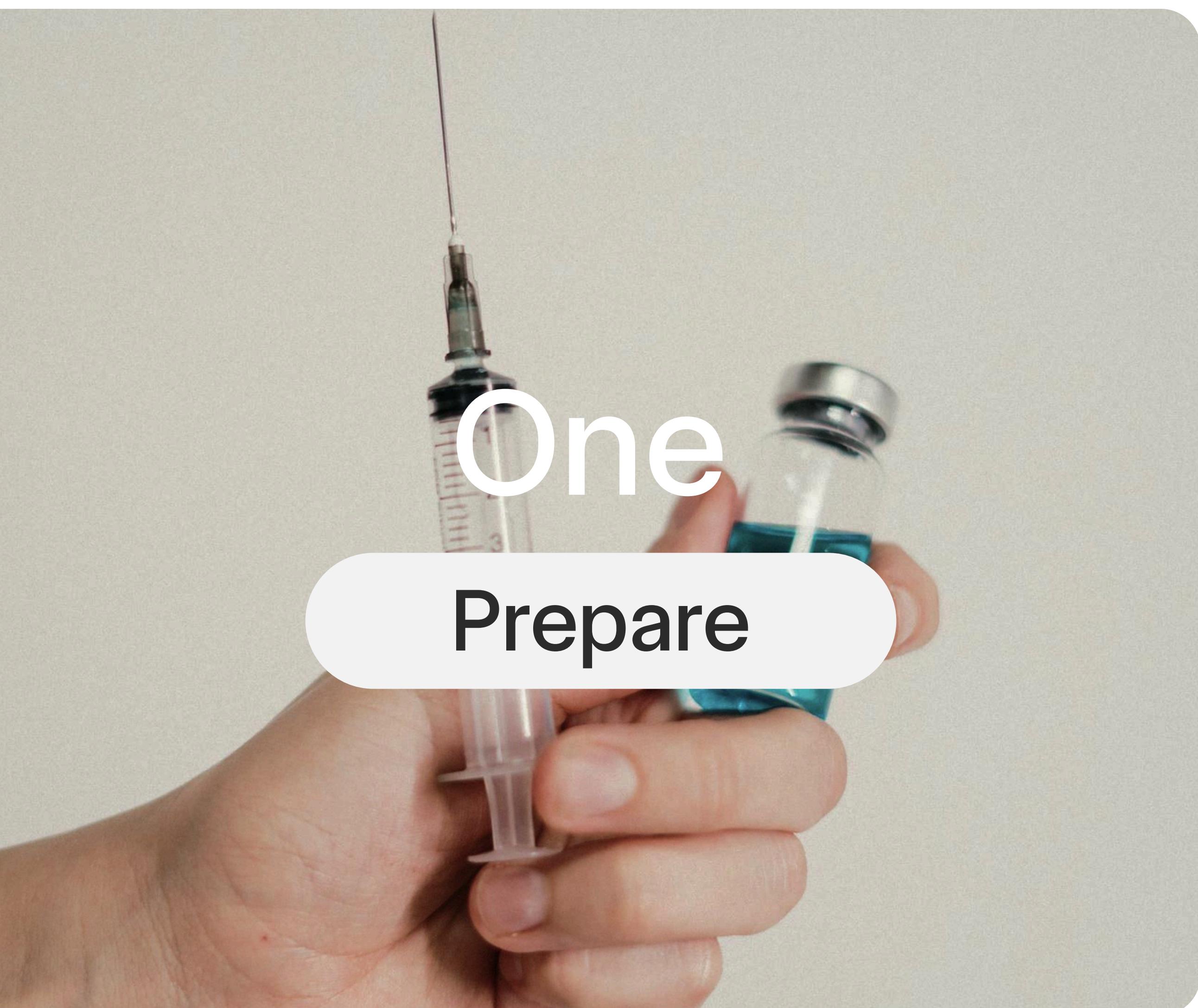
Clinical Research Suggested Use:

- Draw 20 units(2.5mg) into the syringe
- 3 days per week (M,W, F)
- Duration: 3 months
- Reconstitute: add 4mL bacteriostatic water to the to the lyophilized powder vial
- Injection type: subcutaneous injection

Reconstitution & Administration*

*Instructions start on page 2

GHK-Cu Reconstitution

One
Prepare

STEP 1: Remove plastic covers, clean vial and bacteriostatic water top with alcohol pad for 15 seconds

STEP 2: Using the large syringe from your administration kit, pull out 4mL of Bacteriostatic water

- It may take a few repetitions to load your syringe with the 4mL with no air pockets

STEP 3: Once you've loaded your syringe, slowly inject the 4mL of Bacteriostatic water into your GHK-Cu vial:

- On its side to not damage the bonds of the product
- Do not shake, gently swirl if needed
- Allow the solution to sit for at least 5 minutes

*Supplies: 5mL syringe (large), 25G needle, Bacteriostatic water, GHK-Cu vial, Alcohol pad

Two
Pull
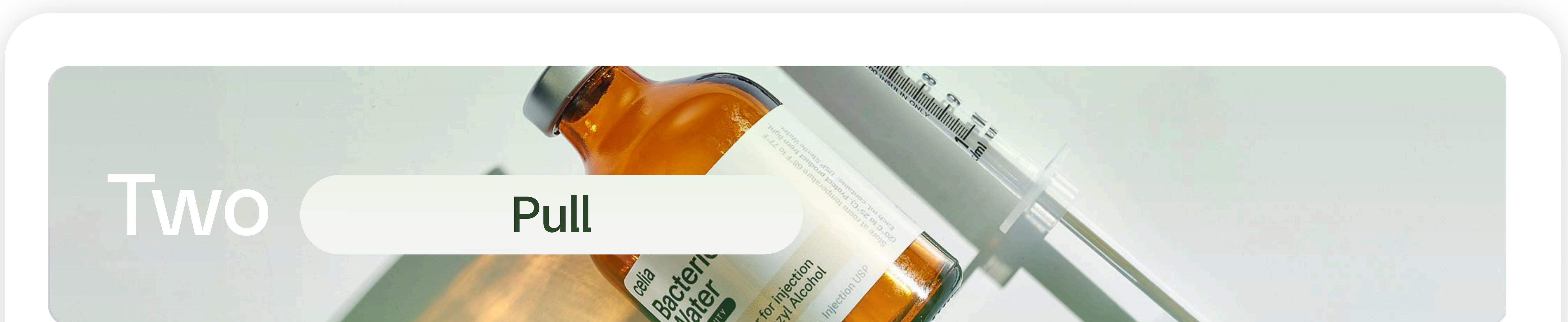
STEP 1: With the smaller needle draw up 20 units of the GHK-cu into the small syringe from your kit

*Supplies: 29G-30G subcutaneous syringe with needle (small), Alcohol pad

Three
Inject

STEP 1: Clean the injection area with an alcohol pad

STEP 2: Inject subcutaneously (see pg 3)

- Repeat 3 days per week (M,W,F)
- Duration: 3 months
- One vial will last 6 weeks

celia

Injection Steps

Subcutaneous Injection steps:

1 Choose & Clean the Injection Site

· Use the abdomen (3 inches from the belly button), thigh, or upper arm. Rotate sites to prevent irritation. Clean the area with an alcohol swab and let it dry.

2 Inject

· Pinch 1 to 2 inches of skin, insert the needle at a 90° angle, and slowly push the plunger down.

3 Remove the Needle & Dispose

· Pull the needle out at the same angle, apply light pressure with gauze (don't rub), and dispose of the syringe in a sharps container.

4 Monitor for Reactions

· Mild redness or soreness is normal. Seek medical help if you experience severe pain, swelling, or an allergic reaction.

Intramuscular Injection steps:

1 Choose & Clean the Injection Site

· Use the thigh (vastus lateralis), upper arm (deltoid), or glute (ventrogluteal or dorsogluteal muscle).
   · Rotate sites to prevent soreness. Clean the area with an alcohol swab and let it dry.

2 Inject

· Stretch the skin taut, hold the syringe like a dart at a 90° angle, and insert the needle quickly and smoothly. Slowly push the plunger down to inject.

3 Remove the Needle & Dispose

· Pull the needle straight out, apply light pressure with gauze (don't rub), and dispose of the syringe in a sharps container.

4 Monitor for Reactions

· Mild soreness or redness is normal. Seek medical help if you experience severe pain, swelling, or an allergic reaction.

GHK-Cu Mechanism of Action

- **Collagen Synthesis and Tissue Repair:**
  - GHK-Cu activates TGF-β, a key regulator in collagen synthesis and extracellular matrix (ECM) production. TGF-β induces the expression of fibroblasts, which are responsible for the production of collagen and other components of the ECM. This promotes tissue regeneration, wound healing, and overall skin repair by enhancing the structural integrity of tissues.

- **Promotion of Angiogenesis:**
  - GHK-Cu stimulates the secretion of vascular endothelial growth factor (VEGF), which plays a crucial role in the formation of new blood vessels (angiogenesis). This process is essential for improving blood supply to tissues, facilitating the delivery of oxygen and nutrients, and enhancing the healing process, especially in damaged or injured tissues.

- **Anti-Inflammatory Effects:**
  - The copper ion in GHK-Cu enhances its ability to reduce inflammation by modulating pro-inflammatory cytokine expression. It helps in the regulation of immune cell activity, reducing the overall inflammatory response in damaged tissues. This contributes to faster tissue healing and minimizes damage associated with chronic inflammation.

- **Cellular Repair and Regeneration:**
  - GHK-Cu promotes cellular repair by influencing various signaling pathways involved in cell proliferation, migration, and differentiation. By enhancing the activity of growth factors like VEGF and TGF-β, GHK-Cu accelerates the regeneration of skin cells, fibroblasts, and other tissue cells, leading to quicker healing and regeneration of damaged tissues.

- **Wound Healing:**
  - GHK-Cu accelerates wound healing by stimulating multiple mechanisms, including collagen production, angiogenesis, and increased cellular migration to the wound site. Its influence on growth factors and collagen synthesis results in stronger, more resilient tissue that heals more rapidly.