

PRESCRIPTION MONOGRAPH

Compounded Active Ingredients: GHK-Cu

Form: Topical Foam

Drug Class:

- Peptide complex (endogenous tripeptide)
 - Copper-binding growth factor analog
-

Mechanism of Action^{1,2}:

GHK-Cu is a naturally occurring copper-binding tripeptide that is intended to:

- Bind copper(II) ions, delivering them to tissues to support wound healing, tissue remodeling, and antioxidant defense.
 - Upregulate collagen and glycosaminoglycan synthesis in skin and connective tissue.
 - Modulate gene expression involved in inflammation, angiogenesis, hair growth, and cellular repair.
 - Scavenge free radicals, reducing oxidative damage.
 - Increase stem cell activation and supports epithelial regeneration.
-

Indications Commonly Prescribed For:

- Skin rejuvenation / anti-aging
 - Wound healing and scar reduction
 - Hair regrowth support
 - Microneedling and post-laser therapy
 - Joint or soft tissue repair
 - Systemic wellness or anti-inflammatory support
 - Neuroprotection
 - Fibroblast activation
 - Metabolic modulation
-

Before Use: Let your health care provider know if you have any medication allergies before you take this compounded preparation. Let your health care provider know if you have any liver or kidney problems. Let your healthcare provider know of all supplements you are currently taking.

Contraindications:

- Known allergy to GHK or copper compounds
 - Wilson's disease (copper metabolism disorder)
 - Active neoplastic disease (caution due to proliferative effects)
-

Cautions: Let your Healthcare provider know if you experience any adverse side effects.

How to Use: This compounded preparation is provided as a topical foam for application to the scalp. Apply the directed amount of foam to the affected areas, usually once or twice daily as instructed by your provider. Part the hair to ensure the foam makes direct contact with the scalp and gently massage if recommended. Wash your hands thoroughly after application. Avoid contact with the eyes, mouth, or broken skin. If you miss a dose, take as soon as you remember, but not at the time for the next dose. Desired results may take up to several weeks.

PRESCRIPTION MONOGRAPH

Warnings and Precautions:

- Monitor for signs of copper overload with prolonged systemic use
-

Adverse Reactions:

Common:

- Mild skin irritation
- Transient erythema

Rare:

- Nausea, dizziness
-

Interactions:

- Chelating agents (e.g., EDTA) may reduce GHK-Cu effectiveness
 - Avoid combining with high-dose zinc (competes with copper binding)
-

Use in Specific Populations:

- Pregnancy: Safety not established; avoid systemic use
 - Liver/Kidney Disease: No known hepatotoxicity or nephrotoxicity
 - Pediatrics: Avoid systemic use; topical use unstudied
 - Geriatrics: Frequently used for anti-aging benefit
-

Storage:

- Store in original container at room temperature (up to 30°C or 86°F)
 - Store in a cool dry place away from heat, sunlight, and moisture
-

Monitoring Parameters:

- Skin/hair response over 8–12 weeks
 - Liver function tests if used systemically long-term
 - Copper and ceruloplasmin levels in extended systemic protocols
-

Citations:

1. Dou Y, Lee A, Zhu L, Morton J, Ladiges W. The potential of GHK as an anti-aging peptide. *Aging Pathobiol Ther.* 2020;2(1):58-61. doi:10.31491/apt.2020.03.014
 2. Pickart L, Vasquez-Soltero JM, Margolina A. GHK Peptide as a Natural Modulator of Multiple Cellular Pathways in Skin Regeneration. *Biomed Res Int.* 2015;2015:648108. doi: 10.1155/2015/648108. Epub 2015 Jul 7. PMID: 26236730; PMCID: PMC4508379.
-