GENORACLE

GHK-Cu

Purity: >98% (HPLC on request) | Molecular Formula: C28H52CuN12O8
Molecular Weight: 748.346 g/mol | Sequence: Non-Peptide

DESCRIPTION:

GHK-Cu is a naturally occurring copper complex that was first identified in human plasma, but has hence been found in multiple locations such as saliva and urine. Copper peptides are small, naturally occurring protein fragments that have high affinity for copper ions, which are critical to normal body function. GHK-Cu has a variety of roles in the human body including, but not limited to, promoting activation of wound healing, attracting immune cells, antioxidant and anti-inflammatory effects, stimulating collagen and glycosaminoglycan synthesis in skin fibroblasts, and promoting blood vessel growth. There has been evidence that has shown that it acts as a feedback signal that is generated after tissue injury. First, it seems to act as a potent protector of tissue and anti-inflammatory agent that controls the oxidative damage that occurs post-tissue injury. Further, it then plays a big role in signaling tissue remodeling which removes damaged/scarred tissue and generates new, healthy tissue. However, these positive effects decline with age because the concentration of GHK-Cu in the body decreases with age. Thus, there is an increase in inflammation, cancerous activity, and tissue destruction. Clinically, it is mostly used to decrease fine lines and wrinkles and to improve hair regrowth.

PROTOCOL:

Content & Potency: Provided as a 50mg lyophilized vial
Vial reconstitution: 3ml sterile water for injection
Suggested dosage: Inject 2mg (0.12ml or 12units) subcutaneously once daily

CLINICAL RESEARCH:

GHK Peptide as a Natural Modulator of Multiple Cellular Pathways in Skin Regeneration

GHK (glycyl-L-histidyl-L-lysine) is present in human plasma, saliva, and urine but declines with age. It is proposed that GHK functions as a complex with copper 2+ which accelerates wound healing and skin repair. GHK stimulates both synthesis and breakdown of collagen and glycosaminoglycans and modulates the activity of both metalloproteinases and their inhibitors. It stimulates collagen, dermatan sulfate, chondroitin sulfate, and the small proteoglycan, decorin. It also restores replicative vitality to fibroblasts after radiation therapy. The molecule attracts immune and endothelial cells to the site of an injury. It accelerates wound -healing of the skin, hair follicles, gastrointestinal tract, boney tissue, and foot pads of dogs. It also induces systemic wound healing in rats, mice, and pigs. In cosmetic products, it has been found to tighten loose skin and improve elasticity, skin density, and firmness, reduce fine lines and wrinkles, reduce photodamage, and hyperpigmentation, and increase keratinocyte proliferation. GHK has been proposed as a therapeutic agent for skin inflammation, chronic obstructive pulmonary disease, and metastatic colon cancer. It is capable of up and down regulating at least 4,000 human genes, essentially resetting DNA to a healthier state The present review revisits GHK's role in skin regeneration in the light of recent discoveries.

GHK Peptide as a Natural Modulator of Multiple Cellular Pathways in Skin Regeneration

Pickart, Loren & Vasquez-Soltero, Jessica & Margolina, Anna. (2015). GHK Peptide as a Natural Modulator of Multiple Cellular Pathways in Skin Regenerati on. BioMed Research International.