BPC157+TB500+GHK-CU
Research Applications

US Peptide Co

Mechanism of Action

This research blend combines BPC 157 and TB-500, two peptides with distinct but complementary mechanisms. BPC 157 interacts with the NO system and modulates growth factor expression, while TB-500 regulates actin polymerization and cell migration. In research models, this combination has demonstrated potential for studying synergistic effects on tissue regeneration pathways, cytoskeletal organization, and cellular repair mechanisms.

Molecular Profile

- Components: BPC 157 (1,419.6 Da) + TB-500 (1,012.2 Da) + GHK-Cu (1,177.4 Da)
- Sequence BPC 157: Gly-Glu-Pro-Pro-Pro-Gly-Lys-Pro-Ala-Asp-Asp-Ala-Gly-Leu-Val
- Sequence TB-500: Ac-SDKP-Thr-Beta-Ala-$CONH_2$
- Sequence GHK-Cu: Gly-His-Lys (complexed with copper)

Laboratory Considerations

- Store lyophilized powder at -20°C
- Once reconstituted store at 4°C
- Protect from light and oxidizing agents

Research Applications

- Multi-pathway tissue regeneration research
- Investigation of extracellular matrix remodeling mechanisms
- Models examining complementary growth factor expression
- Research on cellular antioxidant and anti-inflammatory pathways

References

1. Pickart L, et al. Growth-modulating plasma tripeptide may function by facilitating copper uptake into cells. Nature. 1980;288(5792):715-717.
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3. Goldstein AL, et al. Thymosin β_4: a multi-functional regenerative peptide. Basic properties and clinical applications. Expert Opin Biol Ther. 2012;12(1):37-51.
4. Pickart L, et al. The human tri-peptide GHK and tissue remodeling. J Biomater Sci Polym Ed. 2008;19(8):969-988.
5. Jose S, et al. Copper-dependent GHK peptide activation of Akt/mTOR signaling in human dermal fibroblasts. Exp Dermatol. 2021;30(4):586-593.