GHRP-6
Research Applications

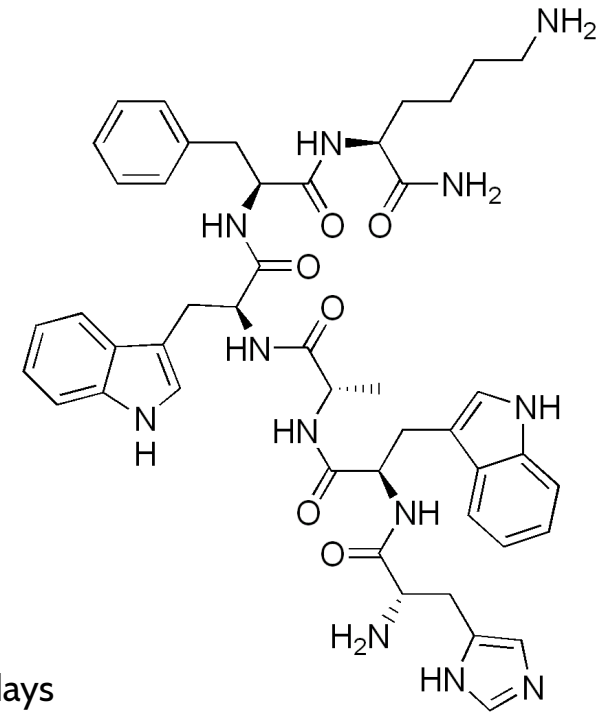
US Peptide Co

Mechanism of Action

GHRP-6 (Growth Hormone Releasing Peptide-6) is a synthetic hexapeptide that functions as a ghrelin receptor agonist. In research models, it binds to the growth hormone secretagogue receptor (GHS-R1a), stimulating growth hormone release through multiple signaling pathways. GHRP-6 has demonstrated unique effects on calcium channel activation and exhibits distinct binding characteristics compared to other GHRPs, making it valuable for comparative receptor signaling research.

Molecular Profile

- Chemical Formula: $C_{46}H_{56}N_{12}O_6$
- Molecular Weight: 873.02 Da
- Sequence: His-D-Trp-Ala-Trp-D-Phe-Lys-NH_2



Research Applications

- Growth hormone secretagogue research models
- Investigation of ghrelin receptor signaling pathways
- Studies on appetite regulation mechanisms
- Research on cellular pathways in cardiac tissue

Laboratory Considerations

- Store lyophilized powder at -20°C
- Once reconstituted, store at 2-8°C and use within 5 days
- Protect from light during storage and experimentation
- Avoid repeated freeze-thaw cycles

References

1. Bowers CY, et al. On the in vitro and in vivo activity of a new synthetic hexapeptide that acts on the pituitary to specifically release growth hormone. Endocrinology. 1984;114(5):1537-1545.
2. Cordido F, et al. Growth hormone (GH) responses to the combined administration of GH-releasing hormone plus GH-releasing peptide-6 in adults with GH deficiency. J Clin Endocrinol Metab. 1995;80(1):53-59.