

RECOVERY

TB-500

Thymosin Beta-4 Fragment (Ac-LKKTETQ)

Synthetic Tb4 active fragment. Cardiovascular repair, anti-inflammatory, BPC-157 stack partner.

MECHANISM

Actin regulation, cell migration, anti-inflammatory cytokine modulation

DOSAGE

2–2.5 mg twice weekly SC

HALF-LIFE

~3–4 days

FORMAT

Lyophilised powder

BATCH

NU-TB--8638

LOT

179638

CAS

77591-33-4

FORMULA

C38H68N10O13

ISSUED

2025-08-18

RETEST

2026-08-18

OVERVIEW

TB-500 is a synthetic analogue of the actin-binding domain of thymosin beta-4 (Tb4), a ubiquitous intracellular actin-sequestering peptide. It promotes cell migration and proliferation, upregulates actin assembly, and has demonstrated significant cardiac and skeletal muscle repair in preclinical studies. TB-500 covers complementary pathways to BPC-157, particularly cardiovascular repair and systemic anti-inflammatory action.

MECHANISM OF ACTION

Actin regulation, cell migration, anti-inflammatory cytokine modulation

KEY RESEARCH BENEFITS

- Cardiovascular tissue repair and regeneration
- Reduces systemic and local inflammation
- Enhances flexibility and reduces joint pain
- Promotes hair-follicle regeneration
- Synergistic with BPC-157 for injury recovery

RESEARCH NOTES

Animal models demonstrate improved cardiac function post-MI, accelerated wound healing, and reduced inflammatory markers. Phase II human trial in dystrophic epidermolysis bullosa completed (NCT01248065).

STORAGE & STABILITY

Lyophilised: -20 °C, stable >=24 months. Reconstituted: 2–8 °C, use within 14 days.