

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.