

TB-500

PEPTIDES

IMPORTANT: Read This Before Proceeding With Dosing Go to the Prep & Injection Guide for proper reconstitution, syringe sizing, and injection protocols. Mistakes here can compromise your research. Click here to read the Prep & Injection Guide TB-500 A derivative of thymosin beta

IMPORTANT: Read This Before Proceeding With Dosing Go to the Prep & Injection Guide for proper reconstitution, syringe sizing, and injection protocols. Mistakes here can compromise your research. Click here to read the Prep & Injection Guide TB-500 A derivative of thymosin beta-4, a naturally occurring compound that is primarily synthesized by the thymus gland, and artificially synthesized in a laboratory. TB-500 promotes and accelerates wound healing, muscle repair, bone, joint and tissue strength, endothelial health, and is used for anti-aging, injury recovery, the reduction of inflammation, cardiovascular health, and to treat the symptoms of arthritis, tendonitis, and other inflammatory diseases. It is one of the best peptides for ligament and tendon repair, stimulates collagen synthesis.

Benefits

- **Boosts the immune system:** increases the levels of white blood cells and antibodies, strengthening the immune system and protecting against a wide array of diseases. Heightens immune response through a number of mechanisms, including: Inhibits white blood cell infiltration and decreases levels of pro-inflammatory cytokines Has antiviral properties Enhances the ability of antibodies to bind with antigens (toxins or other foreign substances) to easily destroy foreign invaders and remove them from the body Exerts therapeutic immune-benefits in the treatment of primary immunodeficiency and autoimmune diseases
- **Improves cardiovascular health:** prevents the death of heart muscle cells, stimulates vessel growth, activates heart stem cells to initiate regeneration; promotes the migration and survival of heart muscle cells in patients with ischemic heart disease; improved left ventricular function after myocardial infarction; promotes cardiac wound healing
- **Improves liver health:** suppresses the activation of hepatic stellate cells (HSCs), which are the main matrix-producing cells in the process of liver fibrosis; anti-inflammatory and anti-scarring properties which prevent liver scarring; stimulates liver regeneration through promotion of liver cell migration, blood vessel formation, and stem cell maturation; inhibits oxidative stress; inhibits the production of substances which promote liver scarring
- **Accelerates wound healing:** increases angiogenesis (creation of new blood vessels) and cell migration in damaged tissues; improved wound healing markers such as increased the formation of granulation tissues and vascularization; average of 30% increase in new trabecular bone area and 47% less old cortical bone; improves eye health from application to affected eye; accelerates ulcer repair
- **Improves eye health:** promoted rapid corneal wound healing and decreased infiltration of inflammatory substances in those with severe traumatic corneal wounds; significantly alleviates symptoms of severe dry eye
- **Promotes nerve regeneration:** reduces inflammatory infiltrates and stimulates oligodendrogenesis (the formation of the protective covering of nerve cells or neurons); decreased proinflammatory cytokines and spinal lesions in those suffering from spinal cord injuries; may benefit persons with multiple sclerosis
- **Improves brain health:**

improves neurological functional outcomes in sufferers of ischemic stroke (caused by blood clot); reduce brain lesions and cell loss and improves functional recovery following traumatic brain injury (TBI); in patients with stroke and other neurological diseases, treatment with TB-500 appears to remodel or rebuild the nervous system by stimulating self-healing processes in the brain, spinal cord, and nerves • Additional benefits: maintains lung health by suppressing inflammation and preventing lung scarring; protects against diabetes induced nerve injury; improves insulin resistance; helps stabilize blood sugar levels; reduces blood pressure; promotes hair growth by stimulating the major active phase of the hair follicle cycle and promoting the migration of stem cells to the base of the follicle; influenced the growth of blood vessels around the hair follicle by regulating the levels of vascular endothelial growth factor (VEGF); promotes hair growth by affecting follicle stem cell growth and migration; reduces the severity of alopecia TB-500 vs TB4: What is the difference? While both iterations are generally referred to as “Thymosin Beta 4,” they do have differences in their molecular structures: TB-500 is actually a fragment of TB4. Fragments may not have all of the same biological function as the full-length peptide. In this particular case, however, both versions effectively promote tissue repair and regeneration and reduce inflammation. Possible Side Effects (typically minor and temporary) • Injection site reaction (redness, swelling, itching, and/or hives) • Dizziness • Headaches • Fatigue • Nausea • Muscle pain • Flu-like symptoms (rare) • May contribute to bloating in those with Irritable Bowel Syndrome TB-500 influences muscle contractions by regulating the proteins actin and myosin. However, overstimulation of actin and myosin due to incorrect dosing may cause spasms or affect muscle contractions. Most side effects are minor and will disappear as the body adapts to the peptide Signs of an allergic reaction may include • Skin rash • Hot flashes • Face swelling • Itching • Difficulty breathing • Profuse sweating Contraindications • Do not use TB-500 if you are pregnant or breastfeeding • Do not use TB-500 if you have an autoimmune disorder • Do not use TB-500 if you have a facial blood clotting disorder • Do not use TB-500 if you have an active malignancy, are receiving cancer treatment, or have a family history of cancer • Do not use TB-500 if you are receiving treatment for a cardiovascular condition TB-500: 10MG — RECONSTITUTION AND DOSING 8 week cycle followed by 4-8 week washout period May take any time of day/night Fasting not required Subcutaneous Administration Reconstitution Mix with 2mL (200 units) of BAC water Standard Protocol • Week 1 : 20 units (1mg), 2x/week (20 units on two separate days, not 20 units divided between 2 days) • Weeks 2–8: 20-50 units (1-2.5mg), 2x/week. Start at lowest dose and move up gradually, as necessary to continue sustaining benefit. Recommend titrating up 5-10 units at a time. Maximum Protocol 60-100 units per week (3–5mg), divided at your discretion over 1 week: typically 2 or 3 days a week Common Stacks • TB-500 + BPC-157 (Wolverine Stack): Faster injury healing, joint support, gut repair • TB-500 + Growth Hormone Secretagogue (e.g. Ipamorelin, CJC-1295): Enhanced muscle growth, fat reduction, and tissue repair • TB-500 + GHK-Cu : Improves skin healing and boosts collagen production

RESEARCH USE DISCLAIMER: All information in this document is provided strictly for laboratory research and educational purposes. It is not intended for human or veterinary use, diagnosis, or treatment.