



### What is Thymosin Beta-4?

Thymosin is a hormone secreted from the thymus. The thymus is responsible for regulating the immune system and tissue repair. Thymosin Beta-4 has been found to play an important role in protection, regeneration, and remodeling of injured or damaged tissue. It is prescribed for acute injury, surgical repair, and patients that were once athletes that accumulated injury over their lifetime. It acts as a major actin-sequestering molecule and can be taken after cardiac injury for better healing of the tissue in the heart. It is best prescribed to be taken once daily for 20 days.

### How does Thymosin Beta-4 work?

Thymosin Beta-4 is typically found in both types of muscle in the human body – skeletal (the muscles that are required to move) and smooth (muscles such as those in the heart). When damage to tissue occurs, Thymosin Beta-4 is upregulated. Thymosin Beta-4 is released in the body to help people heal from traumas. In the process of healing from injury, It also acts to reduce the amount of scar tissue and improve flexibility. It also has potent anti-inflammatory properties.

### What forms of Thymosin Beta-4 are available?

Thymosin Beta-4 is available reconstituted for injection

### Patient Benefits:

#### Thymosin Beta-4 has been shown to:

- Calms muscle spasm
- Improves muscle tone
- Increases exchange of substances between cells
- Encourages tissue repair
- Helps maintain flexibility
- Reduces inflammation of tissue in joints
- Encourages growth of new blood cells in tissue
- Increases endurance and strength
- Prevents the formation of adhesions and fibrous bands in muscles, tendons, and ligaments

### What You Need to Know

Thymosin Beta-4 appears to be quite well tolerated. No adverse drug interaction has been observed. No side effects, other than some irritation or burning sensation at the site of injection, have been reported.

