# **ENZYME SCIENCE®**

PRACTITIONER DIVISION OF ENZYMEDICA



- Support for systemic stress
- For whole-body enzyme support\*
- With potent proteolytic enzymes

With serrapeptase, Protease Therablend®, calcium and magnesium. curcumin phytosome.\*

Serrapeptase Pro is a potent blend of proteolytic enzymes that supports healthy cardiovascular, circulatory and immune function, as well as supporting the body's natural response to systemic stress.\* Serrapeptase is a versatile, clinically studied enzyme that decreases the body's recovery period after physical activity or exertion, helpful for those with active lifestyles.\*

### **SUPPLEMENT FACTS**

#### **Supplement Facts**

Serving Size: 1 Capsule Servings Per Container: 120

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Amount Per Serving		%DV
Calcium (from Calcium Citrate)	17.5 mg	1%
Magnesium (from Magnesium Citra	0.1 mg te)	<1%
Protease <i>Thera-blend</i> ®	80,000 H	UT **
Serrapeptase	100,000	SPU**

\*\* Daily Value (DV) not established

#### **OTHER INGREDIENTS:**

100% vegetarian capsule (HPMC, water) CONTAINS NO: Casein, crustaceans, eggs, fish, gluten, milk, nuts, sesame, shellfish, soy, wheat; Artificial colors, fillers or flavors

## RECOMMENDED DOSE:

1 capsule daily on an empty stomach, 1 hour before or 2 hours after a meal. More may be taken as needed. Consult a physician before use if you are pregnant or nursing, taking medications or have a medical condition.

# High-Potency Serrapeptase Blend

For over 30 years, serrapeptase has been used in traditional medicine throughout Asia and Europe. Additionally, it has been extensively studied in North America for its therapeutic benefits.<sup>3</sup>

Serrapeptase Pro<sup>™</sup>

Proteolytic enzymes such as pepsin, trypsin and chymotrypsin are naturally produced by the human body to carry out essential functions of breaking down proteins into smaller peptides for efficient digestion and nutrient absorption. Plant, fungal and microbial proteolytic enzymes produced from pineapple, papaya and species of non-pathogenic fungi and bacteria such as Aspergillus and Serratia also confer a benefit. Beyond digestion, research has demonstrated the effectiveness of supplemental proteolytic enzymes in other areas of health and wellness, including immune, cardiovascular, physiological and systemic health.\*

### The history of Serrapeptase

Serrapeptase, also commonly referred to as serratiopeptidase, serratia E-15 protease, serralysin, serratia peptidase, or serrapeptidase, is a proteolytic enzyme produced by the enterobacterium Serratia marcescens E-15.1 Serrapeptase was initially isolated from the microorganism Serratia found naturally in the silkworm's intestine, Bombyx mori L.¹ This enzyme allows the developing moth to dissolve the very strong silk fibers that make up the cocoon, enabling the moth to emerge. Serrapeptase works by only targeting non-living tissues of the cocoon, also known as "dead protein".² Serrapeptase is an extracellular metalloendopeptidase consisting of 470 amino acids and contains a zinc atom at the active site, which plays a vital role in its ability to cleave peptides. This enzyme has been used in traditional medicine throughout Asia and Europe since the 1990s. Additionally, in recent years it has been extensively studied in North America for its therapeutic benefits.³

#### How Serrapeptase acts in the body

When taken on an empty stomach, Serrapeptase is absorbed through the intestine and transported directly into the bloodstream. The enzyme binds to alpha-2 macroglobulin in a 1:1 ratio, allowing it to retain enzymatic activity. Once in the body, it works to optimize health by having an affinity for proteins that are dead, damaged, or do not belong.\*

#### The benefits of Serrapeptase

Serrapeptase supplementation has demonstrated numerous therapeutic benefits through in vitro, in vivo, and clinical studies.<sup>4</sup>

Systemic stress can result from the body's physiological response as a natural defense mechanism to protect against threats and other foreign invaders. As a result, the body can endure physical discomforts while the body is in a state of healing. Clinical studies have illustrated the therapeutic role of the serrapeptase enzyme in the body's repair system.<sup>5,6</sup> The proteolytic nature of this enzyme allows for the ability to dissolve dead and damaged tissue that



is a by-product of the healing response.\* In addition to its proteolytic activity, Serrapeptase possesses both fibrinolytic and caseinolytic properties making this enzyme vital for circulatory and cardiovascular health.\*<sup>7</sup>

Serrapeptase assists in decreasing the physical severity of symptoms by having a direct effect on modifying cell-surface adhesion molecules effecting the movement of immune cells to tissues to encourage homeostasis.\*7 Science suggests that serrapeptase accelerates the healing process by decreasing the amount and viscosity of fluid in tissues.\*8 Decreasing the natural fluid viscosity in joints after physical impacts encourages a quicker recovery to regain mobility and comfort which is especially beneficial to those who live an active lifestyle.

To supplement serrapeptase and strengthen this formula's proteolytic power, we also include Protease Thera-blend®, a blend of multiple fungal and microbial-derived enzymes that remain functional within a broad pH range.

Mild digestive upset can be experienced with high doses of therapeutic proteases. Therefore, Enzyme Science has included calcium and magnesium to make this formula easier on the stomach.

#### Serrapeptase Pro for Optimal Health\*

In optimal health, the body undergoes physiological processes to maintain or restore homeostasis. Eating habits, exercise, weight management, sleep, and lifestyle choices all contribute to systemic stress which the body must react to. Assisting the body to naturally repair and recover accelerates homeostasis and encourages cardiovascular, circulatory, and immune health. Serrapeptase Pro includes potent proteolytic enzymes including serrapeptase to improve circulation, cardiovascular health and immune health, and promote joint mobility.\*

#### References

- 1 Vandana Gupte and Umesh Luthra. (2017). Journal of Pharmaceutical Analysis, 7, 203-207.
- 2 Selvarajan Ethiraj and Shreya Gopinath (2017). Frontiers of Biology in China, 12(5): 333-348.
- **3** Redfern, R. (2006). The Miracle Enzyme is Serrapeptase: The 2nd gift from silkworms. Naturally Healthy Publications.
- 4 Jadhav, S. B., et al. (2020). Biotechnology reports (Amsterdam, Netherlands), 28, e00544.
- **5** Chappi D, M., et al. (2015). Journal of clinical and experimental dentistry, 7(2), e197–e202.
- 6 Chopra, D. et al. (2009). International journal of oral and maxillofacial surgery, 38(4), 350–355.
- 7 Tiwari M. (2017). Asian journal of pharmaceutical sciences, 12(3), 209–215.
- 8 Bhagat, Shivani, et al. (2013). International Journal of Surgery, 11(3), 209-217.

Disclaimer: The information in this document is for educational purposes only and is only intended for healthcare practitioners. It is not to be distributed.

Additional information was made available by the ingredient manufacturers.









As the practitioner division of Enzymedica, America's #1 digestive enzyme company, we know you trust us to help your clients – our integrity and quality reflect the values of your practice. This is our promise.

## **ENZYME SCIENCE®**

#### **CONTACT US**

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\*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.