



LKT Laboratories, Inc.

## Thymosin $\alpha$ -1

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### Product Information

Product ID T3096

CAS No. 62304-98-7

**Chemical Name**

Synonym Thymalfasin, Zadaxin

Formula  $C_{129}H_{215}N_{33}O_{55}$

Formula Wt. 3108.3

**Melting Point**

Purity  $\geq 95\%$

Solubility Soluble in water.

Store Temp  $-20^{\circ}C$

Ship Temp Ambient

**Description** Thymosin  $\alpha$ -1 is an endogenous immunostimulatory peptide that is used to treat immune deficiency diseases and to enhance vaccine immunogenicity. Thymosin  $\alpha$ -1 enhances T-cell, dendritic cell, and antibody responses in vitro and inhibits steroid-induced thymocyte apoptosis. During transplants, thymosin  $\alpha$ -1 activates indoleamine 2,3-dioxygenase, promoting immune tolerance. In vitro, this peptide modulates CD4<sup>+</sup> CD25<sup>+</sup> Foxp3<sup>+</sup> Treg cells and pro-inflammatory cytokine levels.

Ac-Ser-Asp-Ala-Ala-Val-Asp-Thr-Ser-Ser-Glu-Ile-Thr-Thr-Lys-Asp-Leu-Lys-Glu-Lys-Lys-Glu-Val-Val-Glu-Glu-Ala-Glu-Asn

### Pricing and Availability

*Bulk quantities available upon request*

Product ID	Size	List Price
T3096	10 mg	\$441.00
T3096	50 mg	\$1378.10
T3096	1 g	\$6300.00

**References** Tuthill C, Rios I, De Rosa A, et al. Thymosin  $\alpha$ 1 continues to show promise as an enhancer for vaccine response. *Ann N Y Acad Sci.* 2012 Oct;1270:21-7. PMID: 23050813.

Romani L, Moretti S, Fallarino F, et al. Jack of all trades: thymosin  $\alpha$ 1 and its pleiotropy. *Ann N Y Acad Sci.* 2012 Oct;1269:1-6. PMID: 23045964.

Yang X, Qian F, He HY, et al. Effect of thymosin alpha-1 on subpopulations of Th1, Th2, Th17, and regulatory T cells (Tregs) in vitro. *Braz J Med Biol Res.* 2012 Jan;45(1):25-32. PMID: 22245858.

Wan J, Shan Y, Shan H, et al. Thymosin-alpha1 promotes the apoptosis of regulatory T cells and survival rate in septic mice. *Front Biosci (Landmark Ed).* 2011 Jun 1;16:3004-13. PMID: 21622217.

**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.