

## Thymosin alpha 1

<b>CATALOG NO:</b>	P1069-1000 P1069-5000	1 mg 5 mg
<b>ALTERNATE NAMES:</b>	Prothymosin alpha, PTMA, TMSA	
<b>PURITY:</b>	> 99% by HPLC	
<b>MOL. WEIGHT:</b>	3.1 kDa	
<b>ENDOTOXIN LEVEL:</b>	< 1.0 EU/mg	
<b>FORM:</b>	White or off- white osteoporosis powder	
<b>SOLUBILITY:</b>	It is recommended to reconstitute the lyophilized Thymosin alpha 1 in Trifluoro acetic acid. It is slightly soluble in water.	
<b>STORAGE CONDITIONS:</b>	Lyophilized protein can be stored at 4°C. Reconstituted Thymosin alpha 1 should be stored at working aliquots at -20°C.	
<b>SEQUENCE:</b>	Thymosin a1 has a molecular formula of C <sub>129</sub> H <sub>215</sub> N <sub>33</sub> O <sub>55</sub> . Amino acid sequence of 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-OH	
<b>DESCRIPTION:</b>	Thymosin α1 is a peptide fragment derived from prothymosin alpha, a protein that in humans is encoded by the PTMA gene. Thymosin α1 is believed to be a major component of Thymosin Fraction 5 responsible for the activity of that preparation in restoring immune function in animals lacking thymus glands. It was the first of the peptides from Thymosin Fraction 5 to be completely sequenced and synthesized. Unlike β thymosins, to which it is genetically and chemically unrelated, thymosin α1 is produced as a 28-amino acid fragment, from a longer, 113-amino acid precursor, prothymosin α. It has been found to enhance cell-mediated immunity in humans as well as experimental animals.	

### RELATED PRODUCT:

- Thymosin-β4, human recombinant (**Cat. No. 7216-10, -50**)

**FOR RESEARCH USE ONLY! Not to be used on humans.**