

# **California Bioscience**

## **Product Datasheet**

Product Name Cata No Source Synonyms Thymopentin CB500689

### Description

Thymopentin, also known as TP-5, is a synthetic pentapeptide which is the active site of the naturally occurring hormone thymopoietin with immunomodulating properties (corresponding to the amino acids 32-36 of thymopoietin). Thymopentin enhances the production of thymic T cells and may help restore immunocompetence in immunosuppressed subjects. This agent also augments the effects of ionizing radiation by arresting cancer cells in the G2/M phase of the cell cycle.

Thymopentin has a molecular formula of  $C_{30}H_{49}N_9O_9$ , H-Arg-Lys-Asp-Val-Tyr-OH having a Mw of 679.8 Dalton.

#### **Physical Appearance**

Sterile Filtered White lyophilized (freeze-dried) powder.

#### **Purity**

Greater than 99.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

#### Formulation

The protein (1 mg/ml) was lyophilized with no additives.

#### Stability

Lyophilized Thymopentin although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution TP-5 should be stored at 4°C between 2-7 days and for future use below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.