

# **California Bioscience**

# **Product Datasheet**

Product Name	L-
Cata No	C
Source	E
Synonyms	

L-Asparaginase CB500466 Escherichia Coli

# Description

L-Asparaginase is an enzyme that depletes L-Asparagine "an important nutrient for cancer cells" resulting in cancer/tumor cell starvation. L-asparaginase is an anti-tumor agent derived from E.coli.,which can inhibit the growth of malignant cells. It is used mainly for the induction of remission in acute lymphoblastic leukaemia. Because of the lymph node origin of malignant B cells in Multiple Myeloma, L-Asparagine is an essential amino acid for their cell metabolism, and, consequently, L-Asparaginase may be of value in managing the disease.

The rationale behind asparaginase is that it takes advantage of the fact that ALL cellsare unable to synthesize the non-essential amino

acidasparaginewhereas normal cells are able to make their own asparagine. These leukemic cells depend on circulating asparagine. Asparaginase however catalyzes the conversion of L-asparagine to aspartic acidand ammonia. This deprives the leukemic cell of circulating asparagine. L-Asparaginase produced from E.Coli containing 303 amino acids and having a molecular mass of 31731 Dalton.

#### **Physical Appearance**

Sterile Filtered White lyophilized (freeze-dried) powder.

## Purity

Greater than 96.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.

## Formulation

The enzyme was lyophilized with no additives

#### Stability

Two years when stored at -20 $^{\circ}$ C, 2 weeks at 4 $^{\circ}$ C.