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AR10140PU-N OriGene EU

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E. coli L-Asparaginase - Purified **Catalog No.:** AR10140PU-N **Quantity:** 2.5 kIU **Background:** 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. **Uniprot ID:** P37595 NCBI: AP 001459.1 GenelD: 945456 **Species:** E. coli Source: E. coli Format: State: Sterile Filtered White lyophilized (freeze-dried) powder enzyme without additives. Purity: >96.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE. L-Asparaginase produced from E.coli containing 303 amino acids and having a Molecular **Description:** Mass of 31731 Dalton. Biological Activity: One IU of L- Asparaginase is defined as that amount of enzyme required to generate 1 µmol of ammonia per minute at pH 7.3 and 37°C. One unit of enzyme catalyzes hadrylazation of 10 nanomoles of dUTP to dUMP in one hour at 85 Centigrade. **Specific Activity:** 225 IU/mg Molecular weight: 31731 Da Store the antigen for 2 weeks at 2-8°C or at -20°C for longer. Storage: Avoid repeated freezing and thawing. Shelf life: One year from despatch.

For research and in vitro use only. Not for diagnostic or therapeutic work. Material Safety Datasheets are available at www.acris-antibodies.com or on request.



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