

Dispersing Enzyme II

Cat: D6431

Specification: 50mg /100mg /1g

Storage: Store at 2-10°C, after opening: Store at -20°C, valid for half 1 year.

Product Information

CAS: 42613-33-2

Appearance (Character): Powder

Enzyme activity/potency: 300,000-360,000 PU/g

Introduction

Dispase is a neutral, non-polar amino acid N-terminal metalloprotease that cleaves peptide chains, capable of dissociating epithelial cells from tissues into sheets. Historically, technicians have used it for cell separation and dissociation in primary cultures. In recent years, it has also been widely used in the fields of regenerative medicine and tissue engineering, and can be used in conjunction with collagenase. This enzyme rapidly, effectively, and gently dissociates cells, keeping them intact without causing damage to the cell membrane. It is derived from non-animal sources, contains no mycoplasma or animal virus contamination, and is highly stable with respect to serum components, enzyme concentration, processing time, temperature, and pH.

Dispase is a neutral metalloprotease derived from *Paenibacillus* sp. (formerly known as *Bacillus polymyxa*). Its active center contains Zn^{2+} , which is more stable than Ca^{2+} .

It can effectively degrade type IV collagen and fibronectin that constitute the basement membrane, allowing epithelial cells to be dissociated from tissues into sheets.

Unlike the action of proteases such as trypsin and collagenase, dispase causes less cell damage and can gently dissociate cells.

This product contains dextrin and calcium acetate.

This product is mycoplasma-free.

This product does not use animal-derived ingredients.

Usage Instructions:

The enzyme activity is almost unaffected by serum components, so this product can be used regardless of whether serum is present or not. The enzyme reaction can be easily stopped by simply adding EDTA or diluting the reaction solution.

Due to its wide range of operating conditions, the enzyme can be used under different enzyme concentrations, processing times, temperatures, and pH conditions.

The typical cell culture temperature is 37°C, and the enzyme is very stable at this temperature. Depending on the type of cells, this product can be added to the culture medium for suspension culture.

Note

1. Unless otherwise specified, the biochemical reagents produced by our company are generally non-sterile packaged. If they are to be used for cell experiments, please conduct pretreatment in advance.
2. Once dissolved, please store the solution in separate containers to avoid product degradation caused by repeated freezing and thawing.
3. The product information is for reference only. If you have any questions, please call 400-968-6088 for consultation.
4. The products are all for scientific research use only. Do not use it for medical, clinical diagnosis or treatment, food and cosmetics, etc. Do not store them in ordinary residential areas.
5. For your safety and health, please wear laboratory clothes, disposable gloves and masks to operate.