



Dispase II (Neutral protease)

Cat# DISP1

INSTRUCTION MANUAL ZBM0060.00

STORAGE CONDITIONS

- Store at 2-8°C.
- Ship at ambient temperature.
- All orders are delivered via Federal Express Priority courier
- All orders must be processed immediately upon arrival.

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ORDERING INFORMATION AND TECHNICAL SERVICES

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- **World Wide Web** <http://www.zenbio.com>

INTRODUCTION

Dispase II, a non-mammalian, partially purified, neutral protease isolated from culture filtrates of *Bacillus polymyxa*, has proven to be a rapid, effective, but gentle agent for tissue dissociation. This product is animal origin free. The mild proteolytic actions make this enzyme suitable for separating intact epidermis from the dermis and intact epithelial sheets in culture from the substratum. Dispase cleaves fibronectin and type IV collagen, but not laminin, type V collagen, serum albumin, or transferrin. This protease is also used as a secondary enzyme in cell dissociation and tissue dissociation applications, commonly used with collagenase.

Inhibitors include 1mM EDTA, EGTA, 1-10-phenanthroline, and heavy metals.

This product is stable for 12 months upon arrival when stored at 2-8°C.

DIRECTIONS

Prepare Dispase II at 5mg/ml using diH₂O, then passing the solution through a 0.2µm sterile filter.

Digest tissue overnight at 4°C for ~15-18 hours depending on your protocol.

REFERENCE

Stenn *et al.* (1989) Dispase, a neutral protease from *Bacillus polymyxa*, is a powerful fibronectinase and type IV collagenase. *J Invest Dermatol.* 93(2):287-90.

PRODUCT INFORMATION	
Form	Lyophilized
Molar mass	35,900
Unit definition	One unit is defined as the amount of enzyme that will liberate Folin-positive amino acids equivalent to 1 µmole tyrosine per min at 37°C, pH 7.5.
Lot#	DIS001.1
Activity	1.22 units/mg
pH value	Optimum at 8.5
Solubility	H ₂ O
EC number	3.4.24.4
CAS number	9001-92-7