

PRODUCT SPECIFICATION SHEET

DISPASE

Dispase is a bacillus derived neutral metallo protease that is recommended for recovering cells cultured on BIOCOAT® MATRIGEL® Basement Membrane Matrix. Dispase will yield a single cell suspension far more gently and effectively than trypsin, collagenase or other proteolytic enzymes; it will not harm cells harvested for sub-cultivation or bioassays,¹⁻³. In addition, dispase may also be used for tissue dissociation. Dispase cleaves fibronectin, collagen IV and minimally collagen I, but it does not cleave collagen V and laminin.⁴

CATALOG NUMBER:	354235	LOT NUMBER: _____
SOURCE:	<u>Bacillus polymyxa</u>	
QUANTITY & PHYSICAL FORM:	100 milliliters (5,000 caseinolytic units), frozen.	
FORMULATION:	Hank's Balanced Salt Solution (HBSS), pH 7.4.	
RECONSTITUTION AND USE:	Dispase is used full strength to recover cells from Matrigel. See attached for instructions. If entire amount is not to be used immediately, transfer aliquots to sterile plastic tubes and store at -20°C. DO NOT STORE IN FROST-FREE FREEZER. AVOID REPEATED FREEZE THAWS.	
QUALITY CONTROL:	Passes a test for solubilization of a 1 mm thick layer of gelled MATRIGEL after two hours at 37°C. Dispase is a 0.2 micron membrane filtered solution. Tested and found negative for the presence of bacteria, fungi and mycoplasma.	
STABILITY:	Stable for a minimum of 3 months from day of shipment when stored at -20°C.	
REFERENCES:	<ol style="list-style-type: none"> 1. Matsumura, T., et.al., Japanese J. Exp. Med., 45:377 (1975). 2. Matsumura, T., et.al., Japanese J. Exp. Med., 45:383 (1975). 3. Fogarty, W.M., and Griffin, P.J., Biochem. Society Trans., 1:400 (1973). 4. Stenn, K.S., et.al., J. Invest. Dermatology, 93 No. 2:287 (1989). 	

FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES.

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Instructions for use:

1. Thaw in waterbath and equilibrate to 37°C.
2. Remove medium from MATRIGEL® cell culture.
3. Using sterile technique, add to dish at 10 units (0.2 ml) per cm² (e.g. 2 ml per 35 mm dish, 6 ml per 60 mm dish, 16 ml per 100 mm dish).
4. Incubate at 37°C for two hours to insure complete dissolution of the Matrigel.
5. Pipet mixture up and down to disperse cell suspension. Transfer mixture to sterile centrifuge tube.
6. Stop action of Dispase by dilution or chelation of Ca⁺⁺ and Mg⁺⁺ using 5-10 mM EDTA.
7. Spin down cells at low speed and wash several times.
8. Cells may be resuspended in fresh medium for continued culture or prepared for further analysis.

Dispase is also used for tissue dissociation. For best results with your application, please consult appropriate literature references or call our Customer Services for a dispase bibliography (781-275-0004, 1-800-343-2035 within the U.S., outside of Massachusetts).

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