

★ Storage

Store at -20°C.
 Stable at 2-8 °C for 2 weeks.
 Dispase solution should be thawed, aliquoted into working volumes, and refrozen.
Avoid repeated freeze-thaw cycles.

★ Shipping Condition

Ship with blue ice/dry ice.
 This product is stable at room temperature for 3-5 days.

★ Contents

- Product manual
- Dispase Solution 5mg/ml in DMEM/F-12, 5-9 U/ml

ALL PRODUCTS SOLD BY GenDEPOT ARE INTENDED FOR RESEARCH USE ONLY UNLESS OTHERWISE INDICATED. THIS PRODUCT IS NOT INTENDED FOR DIAGNOSTIC OR DRUG PURPOSE

★ Description

Dispase is a protease that is suitable for the gentle dissociation of a wide variety of tissues. Incubation of minced tissue with pre-warmed dispase and gentle agitation will liberate cells with minimal cell damage. Prewarmed dispase can also be used to harvest cells from tissue culture plastic. Unlike trypsin, dispase is not inhibited by serum. Dispase activity is inhibited by EDTA and EGTA. Dispase should be removed from cell suspensions by centrifugation of the cells followed by washing of the cells with buffer or culture medium.

★ Unit Definition

One unit of Dispase equals 181 protease units (release of folin-positive amino acids from casein equivalent to 1 umol of tyrosine per minute at pH 7.5 and 37 °C).

★ Recommended Concentration

Further dilute with DPBS without calcium and magnesium or DMEM/F-12 to a final concentration of 0.6-2.4 U/mL.

★ Disaggregation of tissue

1. Fragment the tissue with a sterile scalpel or scissors.
2. Wash the tissue with a sterile PBS.
3. Incubate the fragments in the Dispase Solution at 37 °C.
Note: Make sure that the tissue fragments are well covered by the solution.
4. Stir slowly at 37 °C until the tissue is sufficiently dissolved.
Note: When using Dispase for the first time, determine the total reaction time by counting the cells. A time of one hour is required for hard compact tissue. The cells will not be adversely affected even after several hours in Dispase.
5. If necessary, separate the dispersed cells from residual tissue by passing the mixture through a sterile stainless steel grid, or simply decant the cells after larger fragments have settled.
 Fresh Dispase Solution may be added to the remaining tissue fragments if further disaggregation is required.

★ Subcultivation of cells

1. Cover the cells with Dispase Solution, prewarmed to 37 °C, incubate for 5min at 37 °C.
2. Decant the Solution and incubate for a further 10 min at 37 °C.
3. Control detaching with the microscope, if necessary incubate for a further 15 min.
4. Suspend the cells in culture medium and spin the cells down, wash the cells with culture medium.
5. Resuspend the cells in fresh culture medium.
6. Plate the cells as usual.

★ Related Product

Product Name	Cat No
Scryptase	CA110
Trypsin-EDTA (10X), 0.5%	CA015
Trypsin, 2.5% (10X)	CA019
Trypsin-EDTA (1X), 0.05%	CA020
Dispase 1mg/ml in DMEM-F-12	CA092