

# Solase Cell Dissociation Solution

## Product Manual

Catalog#01021 100 mL

### I. Product Introduction

Shownin Solase Cell Dissociation Solution is a mild-acting single-cell dissociation solution containing protease and collagenase activity. It enhances cell viability and attachment efficiency, while maintaining good surface antigens after dissociation. It can replace trypsin and Accutase for the dissociation of various types of tissues and cells. The solution is free of any mammalian and bacterial-derived components, making it ready for direct use in cell-based applications.

### II. Product Information

Table 1: Product Description of Solase Cell Dissociation Solution

Product Information	Cat.No.	Amount	Storage
Solase Cell Dissociation Solution	RP01021	100mL	-20 °C for 2 years; 4 °C for 2 months

### III. Instructions for Use

#### (i) Thawing Solase Cell Dissociation Solution

1. Thaw the solution overnight at 4 °C or at room temperature (15–25 °C). Avoid thawing at 37 °C. Mix gently after thawing.

**Tip: If needed, aliquot the solution after thawing for future use.**

2. After thawing, the solution can be stored at 4 °C for up to 2 months. For long-term storage, keep at -20 °C for up to 2 years.

Table 2: Recommended Usage of Solase Cell Dissociation Solution for Different vessels

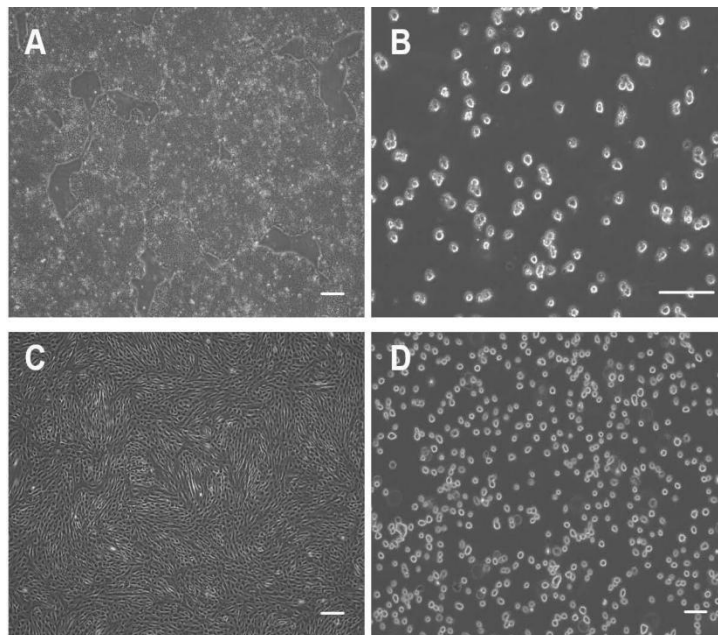
Container	Area	Amount
6-Well Plate	10 cm <sup>2</sup> / well	1.0 mL/ well
12-Well Plate	5 cm <sup>2</sup> / well	0.5 mL/ well
60-mm Culture Dish	20 cm <sup>2</sup>	2.0 mL
100-mm Culture Dish	60 cm <sup>2</sup>	6.0 mL
T-25 Culture Flask	25 cm <sup>2</sup>	2.5 mL
T-75 Culture Flask	75 cm <sup>2</sup>	7.5 mL

**(ii) Single-Cell Dissociation** (Using hiPSC Dissociation in a 6-Well Plate as an Example)

1. Perform dissociation when cell confluence reaches approximately 85%. Wash the cells once with 2 mL/well of DPBS (without  $\text{Ca}^{2+}$  and  $\text{Mg}^{2+}$ ). Is once before dissociation.
2. Refer to Table 2 and add 1 mL/well of **Solase dissociation solution**, then maintain in a 37 °C incubator for 5–8 minutes.

**Tips:**

1. Ensure direct contact between the culture plate and the metal shelf in the incubator for even heating. Do not stack plates.
  2. Dissociation time may vary slightly depending on the substrate (e.g., Matrigel, VTN) and cell type. Complete dissociation is indicated by cell detachment upon gentle tapping of the plate.
  3. Adjust dissociation time as needed based on cell type and experimental conditions.
3. After dissociation, add 2 mL/well of DMEM/F12 to resuspend the cells. Centrifuge at  $200 \times g$  for 5 minutes.
  4. After centrifugation, proceed with cell counting or passaging as needed.

**Figure 1:**

**(A) hiPSC before dissociation. (B) After 5 minutes of dissociation, hiPSCs are completely detached from the matrix and in a single-cell state.**

**(C) hMSC before dissociation. (D) After 5 minutes of dissociation, hMSCs are fully detached and in a single-cell state.**

**Scale bar: 200  $\mu\text{m}$ .**