

## Disperser Stem Cell Enzyme-free Dissociation Solution Instruction

### 【Product Identification】

Disperser Stem Cell Enzyme-free Dissociation Solution

### 【Catalog Number】

MCF-014

### 【Packaging Specifications】

100mL/bottle

### 【Intended Use】

Suitable for the dissociation of induced pluripotent stem cells. It can disperse large undifferentiated stem cell clones into small clones or single clones and detach from the bottom of the plate. The cell clones dissociated by this product have high activity and good growth status after passage. This product does not have the function of inducing and differentiating cells.

### 【Storage Conditions & Shelf Life】

Storage: Protect from light at 2-8°C.

Shelf Life: 2 years.

### 【Sample Requirements】

The cell sample must consist of stem cells that have been cultured under sterile conditions and are in the logarithmic (log) phase of growth. The cell viability must be 90% or higher.

### 【Protocol】

1. Equilibrate the stem cell dissociation buffer to room temperature.
2. Harvest stem cells that have been cultured under sterile conditions and are in the logarithmic (log) phase of growth. Discard the original culture medium. Wash the cells twice using sterile DPBS free of  $\text{Ca}^{2+}$  and  $\text{Mg}^{2+}$ .
3. Add an adequate amount of dissociation buffer according to the table below. Incubate at 37°C for 6-8 minutes. Observe under a microscope until distinct hollows appear within the stem cell colonies and gaps form between the cells. Carefully aspirate the dissociation buffer (if cells are suspended in the solution at this point, they can be collected by centrifugation at 300 x g for 5 minutes). If the intercellular gaps remain small, the dissociation time can be extended slightly or the amount of dissociation buffer can be increased.

Cell dissociation system	12-well plate	6-well plate	T25 flask
Recommended dosage of stem	500 $\mu$ L	1mL	2mL

cell non-enzyme dissociation solution			
If the dissociation system you are using is not listed in the table above, please convert it according to the bottom area of the cell culture vessel.			

4. Add an appropriate amount of stem cell culture medium. Cover the plate, then tap the side of the plate gently. At this point, observe the stem cell colonies detaching from the bottom of the wells (avoid tapping so hard that the cell suspension is splashed onto the lid of the plate). Gently swirl the plate to mix the cell suspension (do not pipette up and down to resuspend the cells). The cells can then be directly processed for subsequent steps, such as passaging or cryopreservation.

**【Product Performance Specifications】**

1. Appearance: The label needs to be clear and easily identifiable. There should be no leakage of the liquid.
2. Clarity: The liquid should be clear and free from any visible particles or impurities.
3. Osmolality: 300~800mOsm/kg
4. Bacterial Endotoxins: <0.5EU/mL
5. Sterility Testing: No microbial growth detected.
6. Mycoplasma Testing: Negative for mycoplasma contamination.

**【Precautions】**

1. After opening, store at 2~8° C.
2. The entire operation process should be carried out under sterile conditions to avoid microbial contamination.
3. If contact with the skin occurs during use, wash immediately with water. If discomfort persists, seek medical attention promptly.
4. Do not use it if the packaging shows cracks or damage.
5. Expired products must not be used.

**【Explanation of the logo】**

None.

**【Manufacturer Information】**