

7.4 Experiment Report (B)

Experiment : HEK293F-hACE2-EGFP cells and 293T cell recovery

I. Experiment purpose: Preparation of cells for subsequent experiments

II. Experimental principle: This is the process of returning the frozen culture to room temperature at a certain rate of rewarming. If rapid thawing is required during the rewarming process, the cells frozen in liquid nitrogen must be thawed quickly to 37°C within 1 minute so that the cells can quickly pass through the most vulnerable temperature interval of -5-0°C, allowing the ice crystals outside the cells to melt quickly while frozen and avoiding the slow melting of the ice crystals into the cells to form recrystallization that can cause damage to the cells.

III. Experimental procedure:

1. Sterilize the laboratory and ultra-clean bench, and irradiate with UV for about 30 Min.
2. Take out the freezing tube from -80°C refrigerator, check whether the cap is screwed on tightly, immediately put it into 37°C water bath to thaw, gently shake the freezing tube to make it all thawed within 1 minute.
3. Transfer the cells to a 15ml centrifuge tube, add 5ml of cell culture medium (DMEM+10% FBS)
4. Place the tube into a centrifuge at 800rpm for 10min at room temperature.
5. 10ml of culture medium resuspend the cells, transfer to 75cm² culture dish and incubate in incubator.