Inactivation Report of Sample Preservative Fluid

1. Experimental Material

a. VERO cells and 293T cells

b. Lentivirus with high-brightness green fluorescent protein.
Virus titer: 10^8 TU/mL

2. Experimental Method

Lentivirus was preserved in the sample preservative fluid with the rate of 1:1, and infected Vero cells and 293T cells respectively. The expression of green fluorescent protein was monitored by fluorescence microscope to verify the viral activity.

3. Experimental Result

No.1 Infect VERO cells

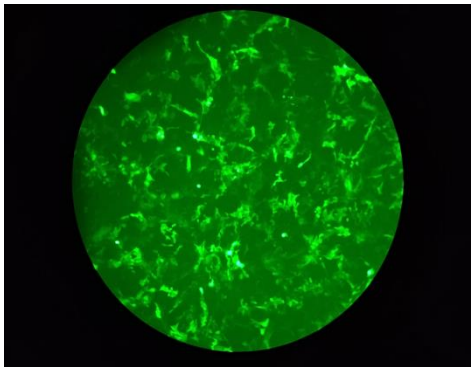

Figure 1

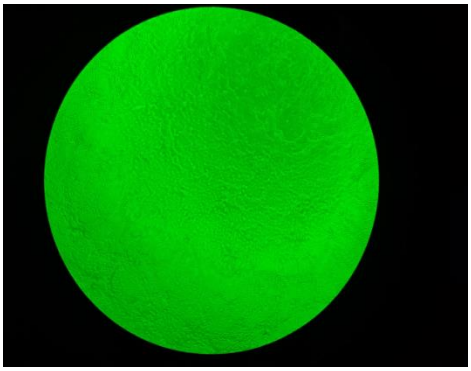

Figure 2

Figure 1: In the control group, VERO cells were directly infected with lentiviruses, and after being cultured for 5 days, they were observed under the fluorescence microscope, and obvious green fluorescence was generated. This shows that the virus has a strong ability to infect.

Figure 2: In the test group, the sample preservative fluid was added to the lentivirus specimen with the rate of 1: 1, and the mixture was left at room temperature for 10 minutes. The lentivirus with sample preservative fluid was used to infect VERO cells. Culture the infected cells for 5 days and take an observation. Under the fluorescence microscope, there is no green fluorescence in the view, it indicates that the virus has been inactivated and has no ability to infect cells.

No.2 Infect 293T cells

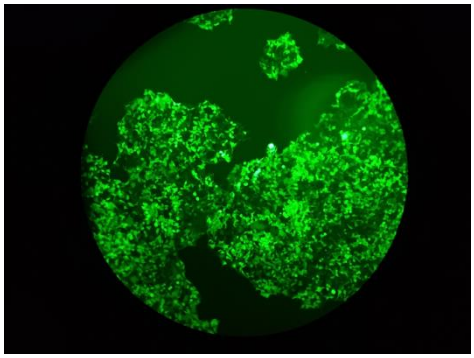

Figure 3

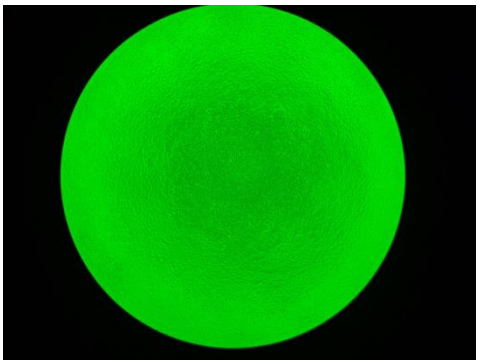

Figure 4

Figure 3：In the control group, 293T cells were directly infected with lentiviruses, and after being cultured for 4 days, they were observed under the fluorescence microscope, and obvious green fluorescence was generated. This shows that the virus has a strong ability to infect.

Figure 4：In the test group, the sample preservative fluid was added to the lentivirus specimen with the rate of 1: 1, and the mixture was left at room temperature for 10 minutes. The lentivirus with sample preservative fluid was used to infect 293T cells. Culture the infected cells for 4 days and take an observation. Under the fluorescence microscope, there is no green fluorescence in the view, it indicates that the virus has been inactivated and has no ability to infect cells.

Conclusion: The cells are infected with lentivirus, and after being cultured for a period of time, cells will show obvious green fluorescence under the fluorescence microscope. The virus preserved in the sample preservative fluid was utilized to infect the cells, and after being cultured for a period of time, there was no green fluorescence observed under the fluorescence microscope. It indicates that the virus was inactivated after preserved in the sample preservative fluid, and had no ability to infect cells. However, the sample preservative fluid can keep the viral nucleic acid stable and no degraded. For more details, see the performance verification report of nucleic acid.