Cell and tissue Lysis buffer（For nitric oxide detection）

Product Information

Catalog No.: B034

Size: 100mL

Form: liquid

Storage: Store at -20℃, valid for one year.

Kit component:

Reagents	Size	Storage
Cell and tissue Lysis buffer （For nitric oxide detection）	100 mL	-20℃

Background

Cell and Tissue Lysis buffer (Nitric oxide assay) is a cell and tissue lysate specifically designed for nitric oxide or total nitric oxide assay.

The samples cracked by the lysate can be used for the detection of nitric oxide assay kit (K054) and total nitric oxide assay kit (K051).

The sample cracked by the lysate contains most of the proteins in the cell or tissue sample, which can be determined with the BCA Protein Assay Kit (K001), and can be used for SDS-PAGE and Western blot detection. It should be noted that the lysate does not contain protease and phosphatase inhibitors. The addition of protease and phosphatase inhibitors to this lysate may interfere with subsequent nitric oxide detection.

The lysate can withstand repeated freezing and thawing.

If the lysate is used for the lysate of cells cultured in one well of a six-well plate, or for lysate of 20mg tissue, about 500-1000 samples can be lysated.

Instructions for use

1. For cell samples:

a. Melt Cell and tissue Lysis buffer, mix and set aside.

b. For adherent cells: Remove the culture solution and wash it with PBS, saline or serum-free culture solution. The lysis buffer is added at a ratio of 100-200μL per well of the 6-well plate. Blow the gun a few times to make full contact between the lysate and the cells. Usually after 1-2 seconds, the cell will be cleaved.

c. For suspended cells: Collect the cells centrifugally and use your fingers to forcefully flick the tube wall to disperse the cells. The lysis buffer was added at a ratio of 100-200μL per cell of the 6-well plate. Then flick the wall of the tube with your finger to fully split the cells. There should be no obvious cell precipitation after full lysis. If the number of cells is large, it must be divided into 500,000 to 1 million cells/tubes. Large groups of cells are more difficult to lysate fully, and a small number of cells are relatively easy to lysate fully.

d. After full cracking, centrifuge at 10,000-14000g for 3-5 minutes, take the supernatant, and then perform subsequent nitric oxide detection or protein concentration determination. If NO detection cannot be completed on the same day after the sample preparation, it can be stored at -20℃, but it is still advisable to complete the detection as soon as possible.

Description of the amount of lysate: Usually adding 100 μL of lysate per well of cells in 6-well plates is sufficient, but if the cell density is very high, the amount of lysate can be appropriately increased to 150 μL or 200 μL.

2. For tissue samples:

a. Melt Cell and tissue Lysis buffer, mix and set aside.

b. Cut the tissue into fine pieces.

c. Add the lysis buffer at a ratio of 100-200 μL per 20 mg of tissue.(If the cracking is not sufficient, more lysis buffer can be appropriately added, and if a high concentration of samples is required, the amount of lysis buffer can be appropriately reduced.)

d. Homogenize with a glass homogenizer or other suitable homogenizing equipment until fully cracked. If the tissue sample itself is very small, the sample can be fully decomposed directly through the strong vortex after the addition of the lysis buffer. The advantage of direct cracking is that it is more convenient and does not need to use homogenizing equipment, and the disadvantage is that the cracking is more adequate than that of using homogenizing equipment.

e. After full cracking, centrifuge 10,000-14000g for 3-5 minutes, take the supernatant, and then perform subsequent nitric oxide detection or protein concentration determination. If NO detection cannot be completed on the same day after the sample preparation, it can be stored at -20℃, but it is still advisable to complete the detection as soon as possible.

Note:

All steps for cracking samples are performed on ice or at 4℃.

This product is only used for scientific research by professionals, and shall not be used for clinical diagnosis or treatment, food or medicine, or stored in ordinary residences.

For your safety and health, please wear a lab coat and disposable gloves to operate.