

WST-1 Assay Kit

Catalog No.:K057

Size: 100 T/500 T/2500T

Storage: Store at -20°C away from light for one year.

Applicable samples: Cells

Kit components:

Components	100 T	500 T	2500T
WST-1 powder	1 tube	1 tube	1 tube
Electron coupling reagent	1 mL	5 mL	25 mL

Assay Principle:

The WST-1 Assay Kit (WST-1 Assay Kit) is a rapid and highly sensitive assay widely used for cell proliferation and cytotoxicity.

WST-1 is a compound similar to MTT that, in the presence of electron-coupled reagents, can be reduced by some dehydrogenases within the mitochondria to produce orange-yellow formazan. The more cells proliferate and the faster, the darker the color; The more cytotoxic, the lighter the color.

The test kit is very convenient. Without the use of isotopes, all detection steps are performed in the same 96-well plate. There is no need to wash the cells, collect the cells, or take additional steps to dissolve formazan. It can be used for the detection of large quantities of samples.

Phenol red and serum had no significant effect on the determination of this kit.

WST-1 had no obvious toxicity to cells. After the addition of WST-1 color development, it can be repeatedly read with the enzyme marker at different times, making the detection time more flexible and easy to find the best determination time.

Assay Procedure:

1. Preparation of WST-1 solution: all electron coupling reagent is added to WST-1 powder, which is completely dissolved into WST-1 solution. WST-1 solution can be stored at 4°C away from light for a week without affecting the use effect. The WST-1 solution that is not used in the short term can be stored away from light for half a year at -20 ° C after packaging (try to avoid repeated freezing and thawing). Some sediment may be observed after dissolution of frozen WST-1 solution, which is a normal phenomenon, and can usually be completely dissolved after incubation in a 37°C water bath for 2-10 minutes.

2. Usually 2000 cells with 100 microliters are added to each well for cell proliferation experiments, and 5000 cells with 100 microliters are added to each well for cytotoxicity experiments (the number of cells used in each well depends on the size of cells, the speed of cell proliferation and other factors). According to the needs of the experiment, culture and

give 0-10 microliters of specific drug stimulation.

3. Add 10 microliters of WST-1 solution per well. If the initial culture volume is 200 microliters, 20 microliters of WST-1 solution should be added, and so on in other cases. A blank control can be used with the corresponding amount of cell culture medium and WST-1 solution added but no cells added.

4. Continue to incubate in the cell incubator for 0.5-4 hours, for most cases, incubation for 1-2 hours is fine. The length of time depends on the type of cells and the density of cells and other experimental conditions. In the first experiment, the enzyme labeling instrument can be used to detect 0.5, 1, 2 and 4 hours later, respectively, and then a time point with a more appropriate absorbance range is selected for subsequent experiments.

5. Place the 96-well plate on a shaker and shake it for one minute to fully mix the system to be tested.

6. Measurement of absorbance at 450nm. If no 450nm filter, 420-480nm filter can be used. Dual wavelength determination can be performed using wavelengths greater than 600nm as reference wavelengths.

Note:

1. Due to the use of 96-well plates for detection, if the cell culture time is long, we must pay attention to the problem of evaporation. On the one hand, since a circle around the 96-well plate is the easiest to evaporate, the method of abandoning the circle around the plate can be adopted to add PBS, water or culture solution; On the other hand, the 96-well plate can be placed close to the water source in the incubator to ease evaporation.

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

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