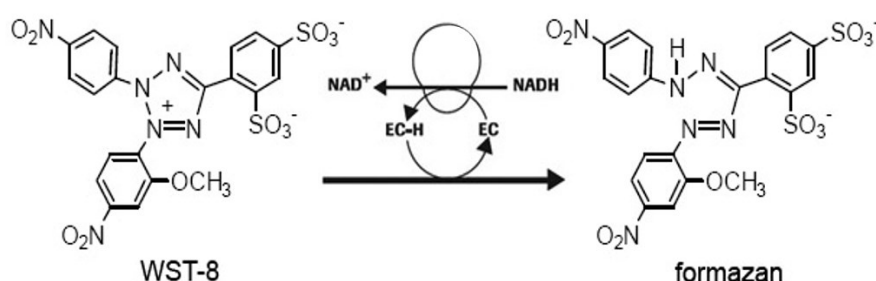


Cell Counting Kit-8

Cat. No.	Product Name	Pack Size
C0037	Cell Counting Kit-8	100T
C0038	Cell Counting Kit-8	500T
C0039	Cell Counting Kit-8	2500T
C0040	Cell Counting Kit-8	10000T

Description:

- Cell Counting Kit-8, abbreviated as CCK-8 kit or CCK8 kit, provides a rapid and highly sensitive method for measuring cell proliferation and cytotoxicity. The kit uses WST-8 compound that can be reduced by dehydrogenases in mitochondria to form water-soluble formazan in orange color (Figure 1). The more cells, the darker the color; the higher the cytotoxicity, the lighter the color. For the same cells, there is a linear relationship between color intensity and cell numbers.



Precautions:

- As 96-well plates are used for culturing cells, evaporation should be noted after a long time of incubation. To avoid the evaporation problem, the perimeter wells of the 96-well plate can be added with PBS, water or culture medium, instead of cell cultures. Placing the 96-well plate close to a water source in the incubator can also reduce evaporation.
- This kit employs the reduction reaction catalyzed by dehydrogenase. Reducing agents or antioxidants that may interfere with the assay should be removed from samples to be tested.
- Air bubbles in wells should be removed before the measurement of absorbance.
- This product is for R&D only. Not for drug, household, or other uses.
- For your safety and health, please wear a lab coat and disposable gloves during the operation

Instructions for Use:

1. In a 96-well cell culture plate with a clear bottom, plate 2000 cells per well for cell proliferation assay or 5000 cells per well for cytotoxicity assay. The suggested total volume is 100 μ l. Add 0-10 μ l of test compounds into cells and incubate for the desired period.
Note: The number of cells per well can be adjusted depending on the cell size, the speed of cell proliferation and other factors.
2. For blank wells (only culture medium without cells), add the same amount of test compounds.
3. Add 10 μ l of CCK-8 Solution to each well.
Note: The amount of CCK-8 Solution added should be adjusted depending on the volume of cell cultures per well. For example, if the starting culture volume is 200 μ l, add 20 μ l of CCK-8 Solution.
4. Incubate the cell culture plate for 0.5-4 hours in a cell incubator. For most cases, 1 hour is sufficient.
Note: The incubation time could be adjusted, depending on experimental conditions such as cell type and cell concentration used. Optimize the incubation time for each experiment.
5. Measure the absorbance at 450nm. If a 450nm filter is not available, the wavelength range from 420 to 480nm can be used. A wavelength greater than 600nm, such as 650nm, can be used as a reference for dual-wavelength measurement.
6. Please refer to Figure 2 for the assay result of Hela cells using Beyotime's CCK-8 kit, which demonstrates a good linear relationship between color intensity and cell numbers.

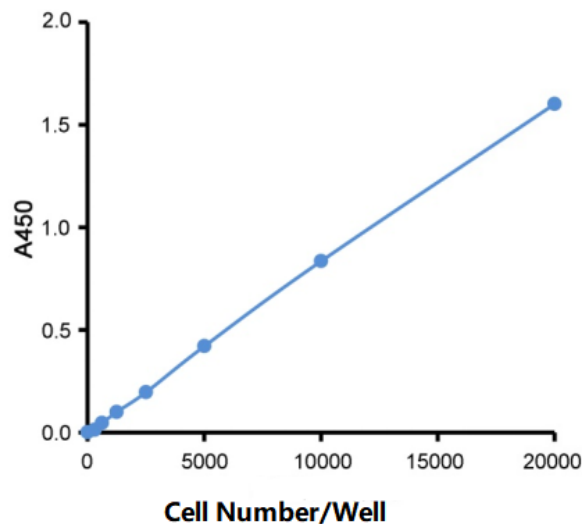


Figure 2. Measurement of Hela cells using Beyotime's CCK-8 kit (C0037, C0038, C0039, C0040). Inoculate 100 μ l of Hela cells at different cell numbers into each well of a 96-well plate. After the cells fully adhere, add 10 μ l of CCK-8 Solution to each well and measure the absorbance at 450nm after 2 hours of incubation. This figure is for reference only, which may vary due to different experimental conditions.

FAQ:

1. Is CCK-8 Solution toxic to cells?

The toxicity of CCK-8 to cells is very low and can be negligible. Cells can still grow normally after the addition of CCK-8, and can be used for other experiments. However, in order to avoid the possible influence of CCK-8 on subsequent experiments, it is not recommended to use the cells incubated with CCK-8 unless the cells are extremely precious.

2. If the absorbance value is too low, what can be done?

- Add more cells appropriately.
- Extend the incubation time after the addition of CCK-8 Solution.

Related Products:

Cat. No.	Product Name	Pack Size
C0009	MTT Cell Proliferation and Cytotoxicity Assay Kit	500T
C0035	WST-1 Cell Proliferation and Cytotoxicity Assay Kit	100T
C0036	WST-1 Cell Proliferation and Cytotoxicity Assay Kit	500T
C0037	Cell Counting Kit-8	100T
C0038	Cell Counting Kit-8	500T
C0039	Cell Counting Kit-8	2500T
C0040	Cell Counting Kit-8	10000T
C0041	Enhanced Cell Counting Kit-8	100T
C0042	Enhanced Cell Counting Kit-8	500T
C0043	Enhanced Cell Counting Kit-8	2500T
C0046	Enhanced Cell Counting Kit-8	10000T

Product Citations:

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