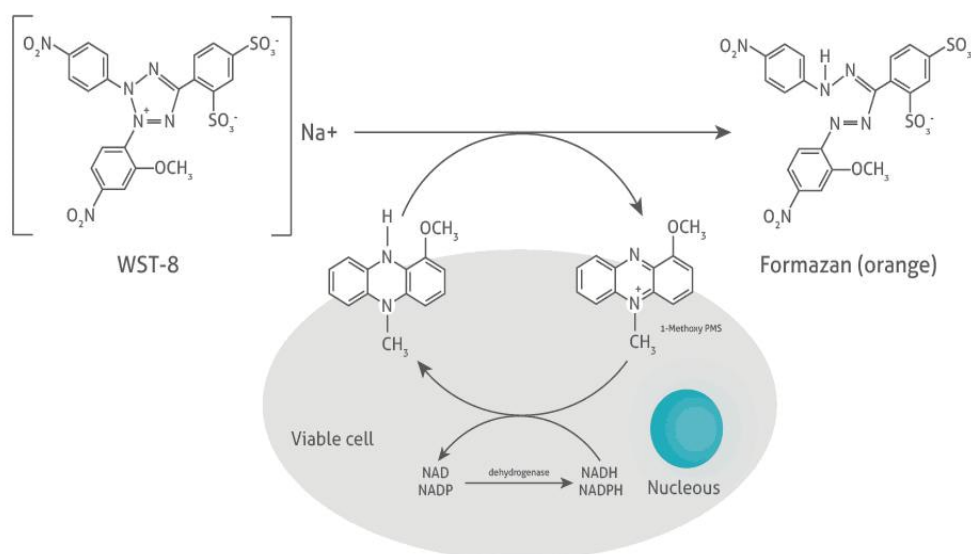


## Description

Cell Counting Kit-8, based on WST-8 (chemical name: 2-(2-methoxy-4-nitrophenyl)-3-(4-nitrophenyl)-5-(2,4-disulfobenzene)-2H-tetrazole monosodium salt), is a rapid and highly sensitive detection kit widely used in cell proliferation and cytotoxicity. In the presence of electron coupling reagent, WST-8 can be reduced by dehydrogenase in mitochondria to form orange formazan, which is highly water-soluble. The depth of color is directly proportional to cell proliferation and inversely proportional to cell toxicity. OD value was measured at 450 nm wavelength by enzyme labeling instrument, which indirectly reflected the number of living cells.



WST-8 is an upgrade substitute product of MTT, which has obvious advantages compared with MTT or other similar products such as XTT or MTS. First of all, formazan, which is reduced by some dehydrogenase in mitochondria, is not water-soluble and needs to be dissolved in a specific solution; while formazan, produced by WST-8, XTT and MTS, is water-soluble, so subsequent dissolution steps can be omitted. Secondly, formazan produced by WST-8 is more soluble than that produced by XTT and MTS. Thirdly, WST-8 is more stable than XTT and MTS, which makes the experimental results more stable. In addition, WST-8 has wider linear range and higher sensitivity than MTT and XTT.

## Product Information

| Product | 500T   | 3000T |
|---------|--------|-------|
| cck-8   | liquid |       |

## Package

500T/3000T

## Storage

It is effective for 2 years at 4°C and 3 years at -20°C.

## Calculation

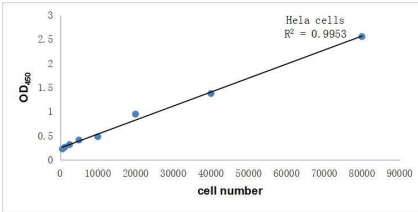
$$\text{Cell viability} = \frac{[A_s - A_b]}{[A_c - A_b]} \times 100\%$$

$$\text{Inhibition rate} = \frac{[A_c - A_s]}{[A_c - A_b]} \times 100\%$$

As: The absorbance of the experiment hole (medium containing cells, CCK-8, substance to be measured)  
 Ac: Absorbance of control hole (medium containing cells, CCK-8, no substance to be measured)

Ab: Blank (medium without cells and substance to be measured, CCK-8) absorbance

Validation Data



Cell Line HeLa cell line <br>Medium  
DMEM+10%FBS <br>Culture Conditions  
37°C 5%CO2 add CCK-8 for 2h, 450nm  
R2=0.9953<br>