

## Cell Counting Kit-8

**Catalog No.:** AR1160

**Size:** 500 tests

### Kit Components

CCK-8 solution 5 ml

### Storage

Store at 4°C in dark for one year.

### Introduction

Cell Counting Kit-8 (CCK-8) allows convenient and sensitive assays for the determination of cell viability in cell proliferation and cytotoxicity assays by utilizing Dojindo's highly water-soluble tetrazolium salt. WST-8 [2-(2-methoxy-4-nitrophenyl)-3-(4-nitrophenyl)-5-(2, 4-disulfophenyl)-2H-tetrazolium, monosodium salt]\* produces a water-soluble yellow-color formazan Dye upon reduction in the presence of an electron carrier. The amount of the formazan dye generated by the activity of dehydrogenases in cells is directly proportional to the number of living cells. Cell Counting Kit-8 is a one-bottle solution and no premixing of components is required. The detection sensitivity of CCK-8 is higher than other tetrazolium salts such as MTT, XTT, MTS or WST-1.

### Protocol

1. Collect cells on logarithmic phase. Count the cells and adjust the concentration of the cell suspension. Add 100 µl of a cell suspension (1000-10000 cells/well) to each well in a 96 well microplate. (Add sterile PBS buffer to marginal wells).
2. Incubate in a CO<sub>2</sub> incubator at 37°C until monolayer cells cover well bottoms (cells number of each well depends on cell size and proliferation speed). Add 0-10 µl drugs with concentration gradient in wells after cells adhere, usually two hours or half a day, including 5 duplicate wells.
3. Add 10 µl CCK-8 into each well. Wells without cells can be used as control.
4. Place in a CO<sub>2</sub> incubator for 0.5-4 hours to react.
5. Measure the absorbance at 450 nm with a microplate reader. Using dual wavelength spectrophotometry, you may choose wavelength longer than 600 nm.