

Cell **Viability** Detection Kit-8

500 tests

Cat No: CVDK-8

Shipping : Ship at ambient temperature.

Storage : Store at 4-8°C. CVDK-8 is stable over one year at 4-8°C with protection from light.

General Information

NutriCulture Cell **Viability** Detection Kit-8 (CVDK-8) allows very convenient assays by utilizing its 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 formazan dye upon reduction in the presence of an electron mediator.

NutriCulture CVDK-8 is a one-bottle solution; no premixing of components is required. *NutriCulture* CVDK-8, allows sensitive colorimetric assays for the determination of the number of viable cells in cell proliferation and cytotoxicity assays. WST-8 is reduced by dehydrogenases in cells to give an orange colored product (formazan), which is soluble in the tissue culture medium. The amount of the formazan dye generated by dehydrogenases in cells is directly proportional to the number of living cells.

The detection sensitivity using *NutriCulture* CVDK-8 is higher than assays using other tetrazolium salts such as MTT, XTT, MTS or WST-1.

Protocol

1. Seed 2000-5000 cells per well in 100 µl medium in a 96-well plate. Incubate cells at 37°C in a humidified CO₂ incubator for 24 hours.
2. Apply various concentrations of substances to be tested to the cells.
3. Incubate the cells for an appropriate length of time (e.g. 12, 24, 48, 72 hours).
4. Add 10 µl of CVDK-8 to each well of the plate. Be careful not to introduce bubbles to the wells, since they interfere with the O.D. reading.
5. Incubate the plate for 1-4 hours in the incubator.
6. Measure the absorbance at 450 nm using a microplate reader.

To measure the absorbance later, add 10 µl of 1% w/v SDS or 0.1 M HCl to each well, cover the plate and store it with protection from light at room temperature. No absorbance change should be observed for 24 hours.