Cell Viability/Cytotoxicity Detection Kit (WST-1 based)

(Cat# K010-500; colorimetric assay; store at -20°C)

Introduction

Traditionally, the determination of cell growth is done by counting viable cells after staining with a vital dye. The measurement and monitoring of cell proliferation is an essential technique in cell-based research. Tetrazolium salts WST-1 is one of the newer generation formazan-based dyes, which release the converted product into the medium in a soluble form. WST-1 is cleaved to formazan by a complex cellular mechanism that occurs primarily at the cell surface.

ABS_Bio™ ready-to-use WST-1 based Cell Viability Detection Kit provides a fast and sensitive cell proliferation colorimetric assay. The entire assay can be performed in a microtitler plate, requires no washing, harvesting, or solubilization steps. The amount of formazan dye by formed directly correlated to the number of metabolically active cells in the culture, and can be quantified by measuring the absorbance of the dye solution at 450 nm (420-480 nm). The kit is supplied with enough reagents for 500 tests in 96-well plate.

Kit Components

WST-1 reagent: 5x 1.0 mL Multiple size are available:

Storage and Handling: The kit is shipped on ice. Store all of the components at -20°C. Shelf Life: 6 months after receipt.

Features for All of Solution & Buffers

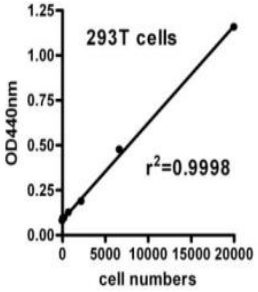
Formulated from analytical grade chemicals.
Ideal for standardizing laboratory work.
Ready to use in minutes.

Applications

Cell Biology applications
Cytotoxity and Proliferation assay: adherent and non-adherent cells, and certain tissues.
Detect proliferation in bacteria, yeast, fungi and protozoa as well.

Protocol

1. Seed 2-5x 10^4 cells in 96-well cell culture plate in 100 µL of medium with or without the test compounds. Perform duplicate or triplicate wells, no-cell but with media and compounds as blank control.
2. Incubate cells for 24-48 hours in standard culture condition.
3. Add 10 µL of the WST-1 reagent to each well, gently mix the plate.
4. Continue culture 0.5-4 hours.
5. Measure OD_{450nm} for each well on an absorbance plate reader. Maximum absorbance of the formazan dye lies between 420 and 480 nm.



Related Products:

Trypan Blue dye (#C8039)
Janus Green Cell Stain Solution (#C8070)
Cell Viability Detection Kit (LDH based; #K025-500)
Scratch Wound Healing Assay Kit (#K040-100)