# **Cell Counting Kit-8**

Cell Counting Kit-8 (CCK-8) enables highly sensitive colorimetric detection of cell viability, an essential tool for cell proliferation and cytotoxicity assays.

The Cell Counting Kit-8 is a colorimetric assay kit used to measure cell proliferation and cytotoxicity.

It is a ready-to-use solution that does not require radioisotopes and correlates with the [<sup>3</sup>H]-thymidine incorporation assay. It can be added directly to the cell media for fast, high-throughput screening without a solubilization process obtaining highly reproducible and accurate results. CCK-8 has shown to achieve higher sensitivity and stability than MTT, MTS or WST-1.

Citations: 108

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## **Ordering Information**

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ALX-850-039-0100	100 tests
ALX-850-039-KI01	500 tests
ALX-850-039-KI02	5x500 tests

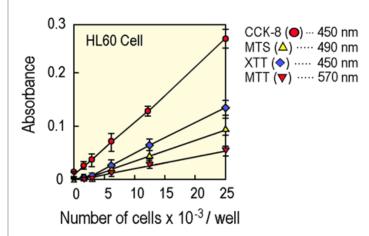
Manuals, SDS & CofA

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- One-step, ready-to-use solution with no radioisotopes
- High sensitivity that correlates with the [<sup>3</sup>H]-thymidine incorporation assay
- High-throughput screening without a solubilization step
- More sensitive and stable than MTT, MTS or WST-1

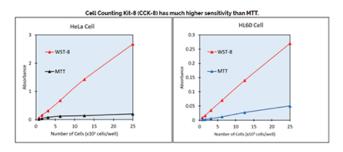
# Simple, Fast, and Accurate Method for Measuring Cell Proliferation

Reagent	MTT	MTS WST-1	CCK-8
Preparation	Thaw Reagent  Dissolve MTT	Thaw Reagent  Dissolve MTS/WST-1	Thaw Reagent
Procedure	Add Reagent  Measure Abs.	Add Reagent  Measure Abs.	Add Reagent Measure Abs.
Handling Time	40 minutes	30 minutes	15 minutes



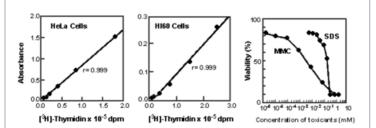
#### Cell Counting kit-8 performance

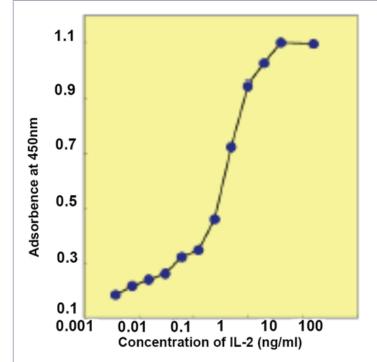
CTLL-2 cells were incubated with various concentrations of IL-2 for 72 hours. CCK-8 solution was added to each well and the absorbance at 450nm was measured. IL-2 exposure resulted in an increase absorbance which correlates to an increase in cell proliferation. CCK-8 shows greatest sensitivity.



 $\label{eq:medium:mem, 10% FCS, L-glutamate (HeLa)} $$RPMI 1640, 10\% FCS, L-glutamate (HL60)$$Incubation: $37^\circ C, 5\%CO_2, 2 hours (HeLa)$$Z^\circ C, 5\%CO_2, 2 hours (HeLa)$$Detection: CCK-8 450 nm, MTT – 570 nm$ 

CCK-8 sensitivity for HeLa and HL60 cells are more sensitive than MTT





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### **Handling & Storage**

**Handling** Protect from light. Avoid freeze/thaw cycles.

Long Term Storage -20°C

Shipping Blue Ice

Regulatory Status RUO - Research Use Only

**Product Details** 

Alternative Name CCKi-8

**Application** Colorimetric detection

Compatibility This product is compatible with the Absorbance 96 Plate

Reader.

Contents WST-8 solution, 1-methoxy-PMS

**Quantity** 100 tests: 1 mL

500 tests: 5 mL

2500 tests: 5 x 5 mL

**Technical Info / Product Notes** Principle: Employs the tetrazolium salt WST-8 (2-(2-

methoxy-4-nitrophenyl)-3-(4-nitrophenyl)-5-(2,4-

disulfophenyl)-2*H*-tetrazolium . monosodium salt), that produces a highly water soluble formazan dye upon biochemical reduction in the presence of an electron carrier, 1-methoxy-PMS. The amount of the yellow colored formazan dye generated by dehydrogenases in cells is

directly proportional to the number of viable cells in a

culture medium.

Last modified: May 29, 2024

