

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 [³H]-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

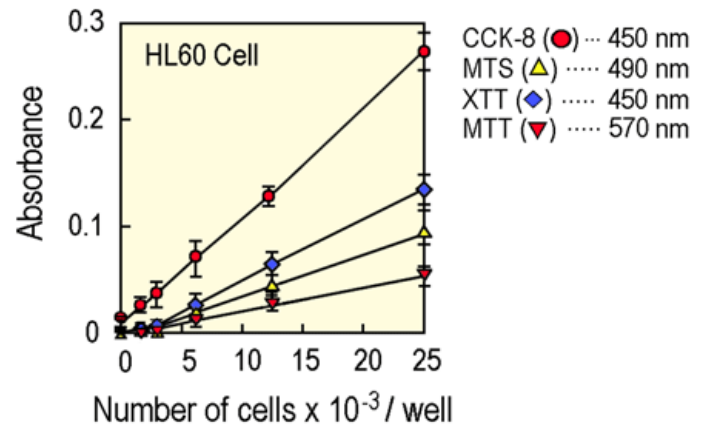
Manuals, SDS & CofA

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

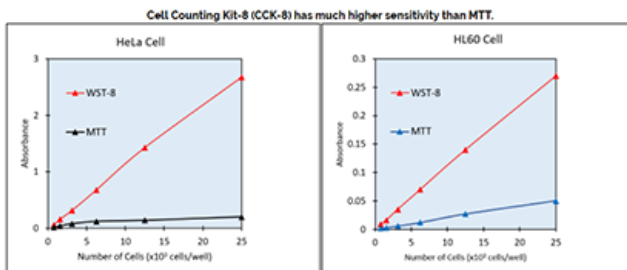
Simple, Fast, and Accurate Method for Measuring Cell Proliferation

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



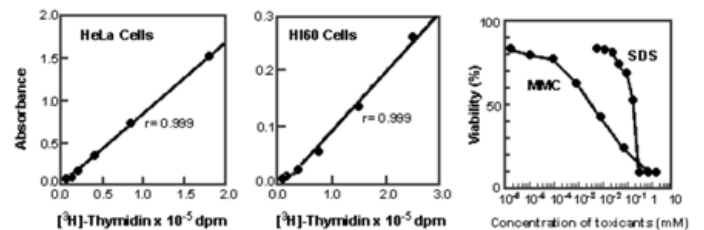
Cell Counting kit-8 performance

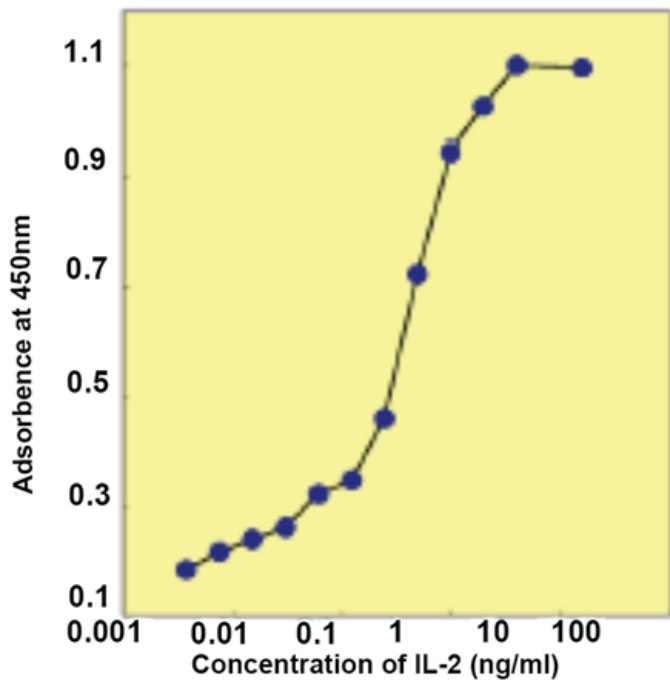
CTLL-2 cells were incubated with various concentrations of IL-2 for 72 hours. CCK-8 solution was added to each well and the absorbance at 450nm was measured. IL-2 exposure resulted in an increase absorbance which correlates to an increase in cell proliferation. CCK-8 shows greatest sensitivity.



Medium: MEM, 10% FCS, L-glutamate (HeLa)
 RPMI 1640, 10% FCS, L-glutamate (HL60)
 Incubation: 37°C, 5%CO₂, 2 hours (HeLa)
 37°C, 5%CO₂, 2 hours (HL60)
 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)-2H-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.

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