Cell Counting Kit-8
ALX-850-039
Simple, fast and accurate assay to measure cell proliferation and cytotoxicity

Product Number/Sizes

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

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 $[^3]H$-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.

Product Details

**ALTERNATIVE NAME:** CCKi-8

**APPLICATIONS:** Colorimetric detection

**QUANTITY:**
- 100 tests: 1 mL
- 500 tests: 5 mL
- 2500 tests: 5 x 5 mL

**HANDLING:** Protect from light. Avoid freeze/thaw cycles.

**SHIPPING:** Blue Ice

**LONG TERM STORAGE:** -20°C

**CONTENTS:** WST-8 solution, 1-methoxy-PMS

**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.

**REGULATORY STATUS:** RUO - Research Use Only
# Simple, Fast, and Accurate Method for Measuring Cell Proliferation

<table>
<thead>
<tr>
<th>Reagent</th>
<th>MTT</th>
<th>MTS WST-1</th>
<th>CCK-8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation</td>
<td>Thaw Reagent</td>
<td>Thaw Reagent</td>
<td>Thaw Reagent</td>
</tr>
<tr>
<td></td>
<td>Dissolve MTT</td>
<td>Dissolve MTS/WST-1</td>
<td></td>
</tr>
<tr>
<td>Procedure</td>
<td>Add Reagent</td>
<td>Add Reagent</td>
<td>Add Reagent</td>
</tr>
<tr>
<td></td>
<td>Measure Abs.</td>
<td>Measure Abs.</td>
<td>Measure Abs.</td>
</tr>
<tr>
<td>Handling Time</td>
<td>40 minutes</td>
<td>30 minutes</td>
<td>15 minutes</td>
</tr>
</tbody>
</table>

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

**Product Literature References**
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