

RealCount CCK-8 Cell Counting Kit

Package size: 500 assays

Catalog number : IRRG8009

Application : Cell Viability

Content

RealCount CCK-8 Cell Counting Kit	Package
500 assays, one bottle (Ready-to-Use)	5 mL

Storage Information

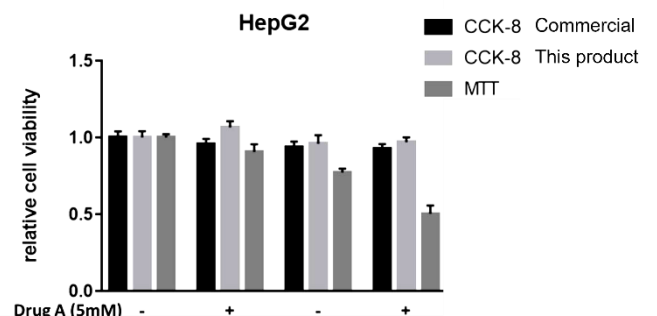
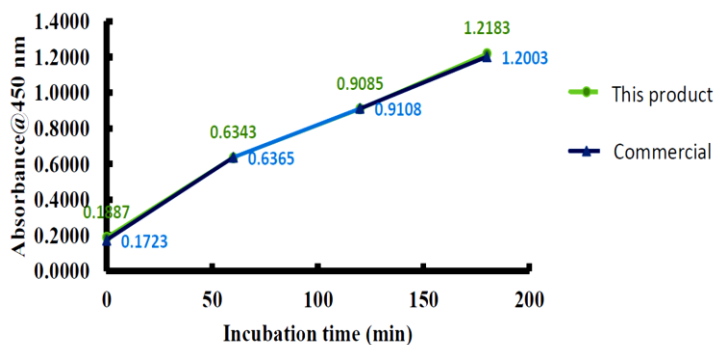
1. CCK-8 solution should keep its original red color and does not turn orange. If you utilize CCK-8 frequently, Keep it at 0-5°C with protection from light, and finish within 1 week after opening.
2. CCK-8 is stable for 2 years at -20 °C with protection from light.

Quick Facts

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Storage conditions before opening: < -20 °C/Protect from light.
Measure the absorbance at 450nm.
Recommended operation conditions: Add 10µl of the CCK-8 solution to each well of the plate containing 100µl culture media and incubates 1~4 hrs. (37°C, 5% CO ₂).
Do not use this product if the solution has turned into yellow color .

Advantages

1. One-bottle, ready-to-use solution.
2. The toxicity of CCK-8 is so low that, after the CCK-8 assay is completed, the same cells can be used for other cell proliferation assays.
3. No harvesting, no washing and no solubilization steps
4. CCK-8 has higher sensitivity than MTT or MTS.



The performance of our RealCount CCK-8 Cell Counting Kit compares with commercial available product.

The effect of drugs on proliferation/toxicity of cancer cell.

Description	<p>RealCount CCK-8 Cell Counting Kit allows very convenient assays by utilizing the 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. CCK-8 is a one-bottle solution; no premixing of components is required. Cell Counting Kit-8, being nonradioactive, 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 culture medium. The amount of the formazan dye generated by the activity of dehydrogenases in cells is directly proportional to the number of living cells. The detection sensitivity of CCK-8 is higher than other tetrazolium salts such as MTT, XTT, MTS or WST-1.</p>																																	
Protocol	<ol style="list-style-type: none"> 1. Inoculate cell suspension (100 µl/well) in a 96-well plate. Also prepare wells that contain known numbers of viable cells (to create a calibration curve in step 5). Pre-incubate the plate in a humidified incubator (e.g., at 37 °C, 5% CO₂). 2. Thaw the CCK-8 on the bench top if it is frozen. Note: It takes about 30 minutes on the bench top at 25 °C. 3. Add 10 µl of the CCK-8 solution to each well of the plate. Note: Be careful not to introduce bubbles to the wells, since they interfere with the O.D. reading. 4. Incubate the plate for 1-4 hours in the incubator. 5. Measure the absorbance at 450 nm using a microplate reader. Prepare a calibration curve using. 																																	
Precautions	<ol style="list-style-type: none"> 1. Repeated thawing and freezing causes an increase in the background, which interferes with the assay. 2. Keep CCK-8 protection from light all the time. 																																	
Background control	<p>Slight spontaneous absorbance around 450 nm occurs in culture medium incubated with CCK-8. This background absorbance depends on the culture medium, pH, incubation time and length of exposure to light. Typical background absorbance after 2 hours incubation is 0.1 - 0.2 absorbance units. To correct for this, prepare one or more control wells without cells, and subtract the average absorbance of the control wells from that of the other wells.</p>																																	
Additional information	<table border="1" data-bbox="424 1339 1418 1928"> <thead> <tr> <th>Properties</th> <th>MTT</th> <th>CCK-8</th> </tr> </thead> <tbody> <tr> <td>Solubility of formazan</td> <td>-</td> <td>+</td> </tr> <tr> <td>Forms</td> <td>Powder</td> <td>1-bottle solution</td> </tr> <tr> <td>Preparation</td> <td>Dissolve before use</td> <td>Ready to use</td> </tr> <tr> <td>Sensitivity</td> <td>+</td> <td>+++</td> </tr> <tr> <td>Detection Speed</td> <td>+</td> <td>+++</td> </tr> <tr> <td>Wavelength</td> <td>560~600nm</td> <td>430~490nm</td> </tr> <tr> <td>Toxicity</td> <td>+</td> <td>-</td> </tr> <tr> <td>Stability</td> <td>+</td> <td>++</td> </tr> <tr> <td>96-well plate compatibility</td> <td>+</td> <td>++</td> </tr> <tr> <td>Convenience</td> <td>+</td> <td>+++</td> </tr> </tbody> </table>	Properties	MTT	CCK-8	Solubility of formazan	-	+	Forms	Powder	1-bottle solution	Preparation	Dissolve before use	Ready to use	Sensitivity	+	+++	Detection Speed	+	+++	Wavelength	560~600nm	430~490nm	Toxicity	+	-	Stability	+	++	96-well plate compatibility	+	++	Convenience	+	+++
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