# abcam

## Product datasheet

# Cell Cytotoxicity Assay Kit (Colorimetric) ab112118

\*\*\*\* 1 Abreviews 23 References 2 Images

#### Overview

Product name Cell Cytotoxicity Assay Kit (Colorimetric)

**Detection method**Colorimetric

Sample type Adherent cells, Suspension cells

Assay type Quantitative

Species reactivity Reacts with: Mammals, Other species

**Product overview** Monitoring cell cytotoxicity is one of the most essential tasks for studying cellular functions. There

are a variety of parameters that can be used. ab112118 uses a proprietary water-soluble dye that changes its absorption spectra upon cellular reduction. The absorption ratio change is directly proportional to the number of living cells. The characteristics of its high sensitivity, non-radioactivity and no-wash method make ab112118 suitable for high throughput screening of cell

proliferation or cytotoxicity against a variety of compounds.

ab112118 does not require pre-mixing of components and has higher sensitivity compared to tetrazolium based colorimetric assays (such as MTT and XTT). It comes with reagents sufficient to run 1000 assays. The kit components are quite stable with minimal cytotoxicity, thus longer incubation times (such as 24-48 hours) are possible if required.

ab112118 is robust and convenient to use. It can be readily adapted for a wide variety of

instrument platforms. The assay can be performed in a convenient 96-well or 384-well microtiterplate format.

Visit our **FAQs page** for tips and troubleshooting.

Cytotoxicity assay protocol summary:

- add assay solution to cells and shake for 30 s
- incubate for 1-24 hrs
- analyze with microplate reader

**Notes** ab112118 should be stored desiccated.

As low as 300 cells can be accurately quantified using ab112118.

**Platform** Microplate reader

**Properties** 

1

#### Storage instructions

Store at -20°C. Please refer to protocols.

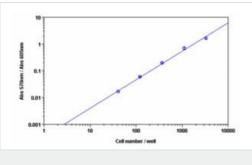
Components	Identifier	1000 tests
Assay Solution	Component A	1 x 20ml

#### **Images**

% Cell viability			
	HeLa	NIH3T3	
1 μΜ	28.51%	56.03%	
10 μΜ	12.78%	43.51%	
50 μΜ	10.52%	34.02%	

Functional Studies - Cell Cytotoxicity Assay Kit (Colorimetric) (ab112118)

- •HeLa: day before experiment cells seeded in 96 wp @ 1e4 cells/well and treated with 1 $\mu$ M, 10  $\mu$ M and 50  $\mu$ M Camptothecin (incubated for 24h); on the day of experiment cells incubated with Assay Solution for 2 hours.
- •NIH3T3: day before experiment cells seeded in 96 wp @ 1e4 cells/well and treated with 1 $\mu$ M, 10  $\mu$ M and 50  $\mu$ M Camptothecin (incubated for 24h); on the day of experiment cells incubated with Assay Solution for 2 hours.



Functional Studies - Cell Cytotoxicity Assay Kit (Colorimetric) (ab112118)

CHO-K1 cell number response was measured with ab112118. CHO-K1 cells at 0 to 10,000 cells/well/100  $\mu$ L were seeded overnight in a black wall/clear bottom 96-well plate. The cells were incubated with 20  $\mu$ L/well of Assay Solution for 3 hours at 37 °C. The absorbance intensity was measured at 570 nm and 605 nm. The ratio of OD570/OD605 is proportional to the number of cells as indicated.

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