

# EZQuant™ Cell Quantifying Kit

Catalogue number: CQ01; Size: 500 tests; Price: \$105

Catalogue number: CQ05; Size: 2500 tests; Price: \$455

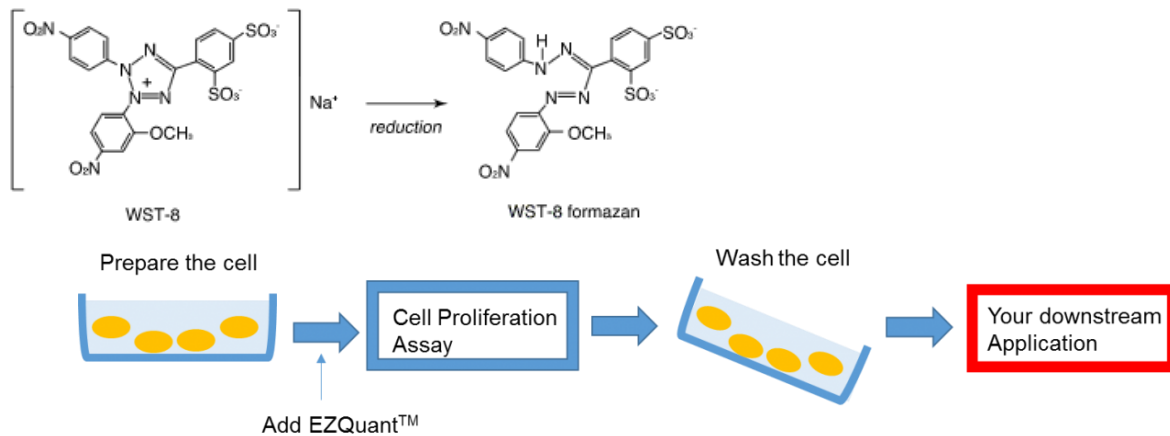
Catalogue number: CQ10; Size: 5000 tests; Price: \$895

## Product Description

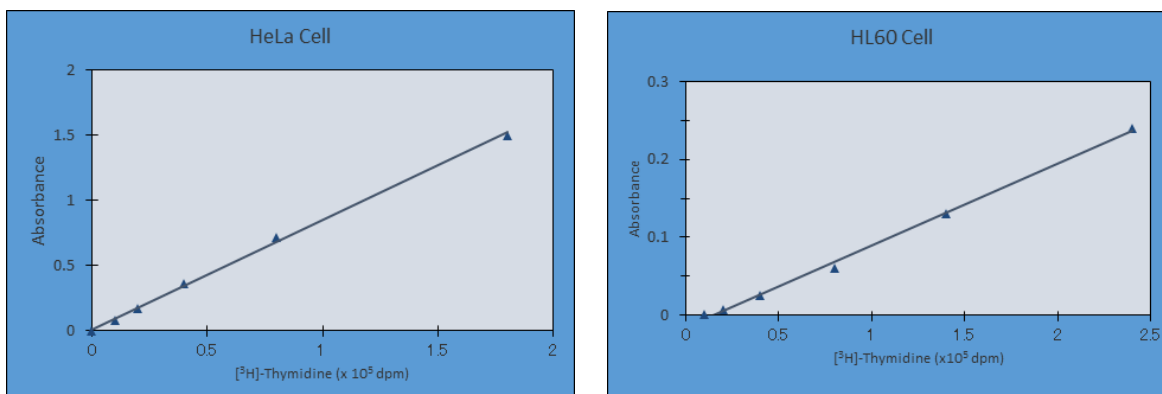
The EZQuant™ Cell Quantifying Kit uses WST-8 to conveniently determine the number of viable cells in cell proliferation and cytotoxicity assays. The reagent is reduced by the metabolic activity of live cells and the amount of formazan produced is directly proportional to the number of living cells. One bottle of EZQuant™ yields 500 tests and no premixing is required. Using EZQuant™ for cell proliferation assays has been shown to correlate well with the [<sup>3</sup>H]-thymidine incorporation assay. In addition, EZQuant™ exhibits a higher detection sensitivity compared to other tetrazolium salts (e.g., MTT, XTT, MTS, or WST-1).

## Features

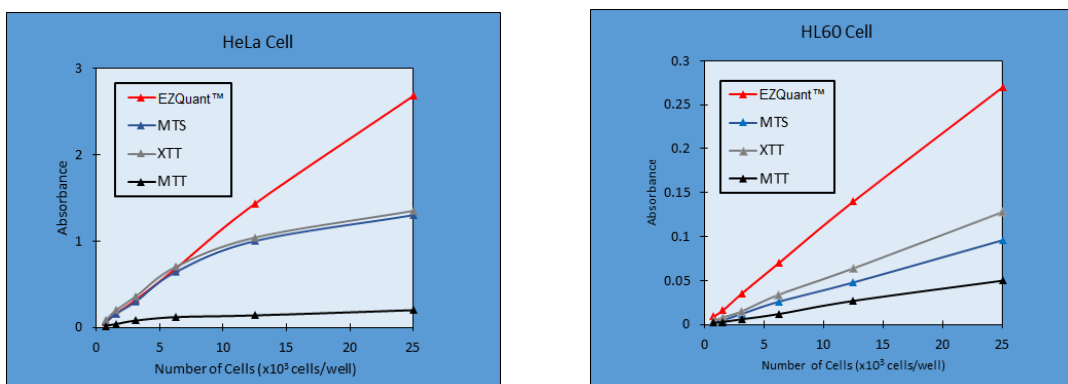
- High Sensitivity
- Non-cytotoxic
- Long Shelf-life
- Simple Protocol



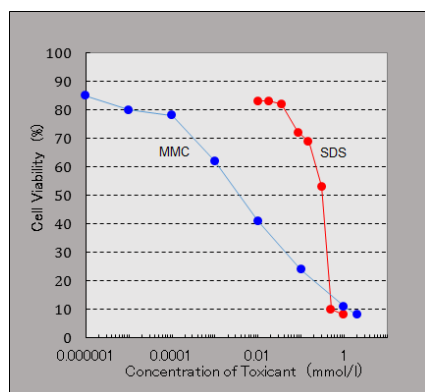
## EZQuant™ Cell Quantifying Kit Results



**Figure 1. Correlation between EZQuant™ and  $[^3\text{H}]$ -thymidine assays.** Medium used for HeLa cells was MEM, 10% FBS and medium used for HL60 cells was RPMI1640, 10% FBS. The amount of  $[^3\text{H}]$ -Thymidine per well was 37 KBq/well and cells were incubated for 4 hours. The amount of EZQuant™ per well was 10  $\mu\text{l}$  and cells were incubated for 3 hours.



**Figure 2. Cell count using EZQuant™ vs. other reagents.** Medium used for HeLa cells was MEM, 10% FBS and medium used for HL60 cells was RPMI1640, 10% FBS. HeLa and HL60 cells were incubated at 37°C, 5%  $\text{CO}_2$  for 2 and 3 hours, respectively. EZQuant™, MTS, XTT, and MTT were detected at 450, 490, 450, and 570 nm, respectively.



**Figure 3. Cytotoxicity test of mitomycin-C (MMC) and sodium dodecyl sulfate (SDS) using EZQuant™.** HeLa cells were cultured in MEM, 10% FBS medium and incubated at 37°C, 5%  $\text{CO}_2$  for 2 hours. Detection and reference wavelengths were 450 and 650 nm, respectively.

## Product Specifications

Product Name	EZQuant™ Cell Quantifying Kit
Catalog #	CQ01, CQ05, CQ10
Size	500 tests (CQ01) / 2500 tests (CQ05) / 5000 tests (CQ10)
Shipping	Room Temperature
Storage and Stability	Store at either room temperature (stable up to 6 months), 0-5 °C (stable up to 1 year) or -20 °C (stable up to 2 years). <i>For frequent use, store at 0-5 °C. Thawing and freezing repeatedly will cause a background increase that will interfere with the assay.</i>
Quality Control	Appearance, blank, and sensitivity tests are performed for each lot. Only lots that pass the following criteria are offered: Blank Absorbance (460 nm) ≤ 0.700 Sensitivity Absorbance (460 nm) ≥ 1.000
Restricted Use	For Research Use Only. Not for use in diagnostic or therapeutic procedures.

## Cell Count Protocol

1. Inoculate cell suspension (100 µl/well) in a 96-well plate. Pre-incubate the plate in a humidified incubator (e.g., at 37° C, 5% CO<sub>2</sub>).
2. Add 10 µl of the EZQuant™ solution to each well of the plate.  
*Be careful not to introduce bubbles to the wells, since they interfere with the O.D. reading.*
3. Incubate the plate for 1 - 4 hours in the incubator.
4. Measure the absorbance at 450 nm using a microplate reader.  
*To measure the absorbance later, add 10 µl of 1% w/v SDS or 0.1 M HCl to each well, cover the plate and store it with protection from light at room temperature. No absorbance change should be observed for 24 hours.*

## Cell Proliferation/Cytotoxicity Protocol

1. Dispense 100 µl of cell suspension (5000 cells/well) in a 96-well plate. Pre-incubate the plate for 24 hours in a humidified incubator (e.g., at 37° C, 5% CO<sub>2</sub>).
2. Add 10 µl of various concentrations of substances to be tested to the plate.
3. Incubate the plate for an appropriate length of time (e.g., 6, 12, 24 or 48 hours) in the incubator.
4. Add 10 µl of EZQuant™ solution to each well of the plate.  
*Be careful not to introduce bubbles to the wells, since they interfere with the O.D. reading.*
5. Incubate the plate for 1 - 4 hours in the incubator.
6. Measure the absorbance at 450 nm using a microplate reader.  
*To measure the absorbance later, add 10 µl of 1% w/v SDS or 0.1 M HCl to each well, cover the plate and store it with protection from light at room temperature. No absorbance change should be observed for 24 hours.*

Publications:

- Peters, Molly C., et al. "**A Novel Polyamine-Targeted Therapy for BRAF Mutant Melanoma Tumors.**" *Medical Sciences* 6.1 (2018): 3.