

Cell viability assays are crucial for measuring the balance between living and dead cells in culture, especially in the context of in vitro drug assessments and cell-mediated cytotoxicity experiments. These assays are vital to the pharmaceutical industry for screening how cells respond to drug candidates or chemical agents. Researchers employ various assays to scrutinize the effects of potential therapeutics, advancing the frontiers of drug discovery and cellular research. Microplate readers with sophisticated data acquisition and analysis software are integral to the assessment of cellular responses using a variety of absorbance, fluorescence, and luminescence assays.

MICROPLATE READERS: THE GAME CHANGER



Versatility

Compatible with various assay types (colorimetric, fluorometric, luminescent)



High-Throughput Capability

Analyze thousands of samples simultaneously with SoftMax Pro 7.2 Software



Real-Time Analysis

Monitor cell viability over time to study drug effects dynamically



Accuracy and Precision

Provide reliable, quantitative data on cell health



Automation

Streamline the drug discovery process, enhancing productivity and reproducibility





Initial Screening

Identify potential therapeutic compounds.

Cell Viability Role—Quick assessment of compound effects on cells.



2 Efficacy Testing

Measure how effective the drug is against target cells.

Cell Viability Role—

Determine if the drug is killing or inhibiting the growth of target cells.



Toxicity Testing

Assess if the drug is harmful to healthy cells.

Cell Viability Role—

Ensure the drug isn't toxic to non-target cells.



IMPACT of Microplate Readers in DRUG DISCOVERY

Increased Efficiency

Faster screening and analysis.

Improved Decision-Making

Based on quantitative, reliable data.

Enhanced Drug Safety and Efficacy

Through precise and comprehensive testing.

Innovative Research

Facilitate novel approaches in drug development.



Microplate readers play a critical role in modern drug discovery by providing essential, precise measurements of cell viability. This technology supports the development of safer, more effective therapeutic drugs by enhancing the accuracy and efficiency of efficacy and toxicity testing.

> Contact us today to get everything you need to run your cell viability assays!

