

# Cell Proliferation, Viability, & Cytotoxicity Assays



Cayman offers a range of related cell-based assays to monitor the life and death of cells. Whether assessing proliferative activity, cell viability, mitochondrial function, cell cycle phase, cell toxicity, or apoptosis, our kits provide a convenient means to help you attain fast, accurate results.

## Proteins

Item No.	Product Name	Measure	Readout	Time to Results
601410	Annexin V APC Assay Kit	Cultured cell apoptosis/necrosis	Flow cytometer	30 minute staining protocol
600300	Annexin V FITC Assay Kit	Cultured cell apoptosis/necrosis	Flow cytometer Fluorescence microscope	30 minute staining protocol
601420	Annexin V PE Assay Kit	Cultured cell apoptosis/necrosis	Flow cytometer	30 minute staining protocol
10009135	Caspase-3/7 Fluorescence Assay Kit	Caspase-3/7 activity in cultured cells	Fluorescence plate reader	2 hours
601360	Early Apoptosis Detection Assay Kit	Four distinct events including early-stage apoptosis	Flow cytometer	30 minute staining protocol
600360	Glutathione Cell-Based Detection Kit (Blue Fluorescence)	Intracellular GSH levels as an early marker of apoptosis	Fluorescence microscope Fluorescence plate reader	2 hours
10009172	JC-1 Mitochondrial Membrane Potential Assay Kit	Mitochondrial membrane potential	Fluorescence microscope Fluorescence plate reader	<1 hour staining protocol
701560	JC-1 Mitochondrial Membrane Potential Flow Cytometry Assay Kit	Mitochondrial membrane potential	Flow cytometer	15 minute staining protocol
601430	Mitochondrial PT Pore Assay Kit	Simultaneous mitochondrial membrane integrity and membrane potential	Flow cytometer Fluorescence microscope	15 minute staining protocol
601280	Multi-Parameter Apoptosis Assay Kit	Four distinct apoptotic events	Flow cytometer Fluorescence microscope	<1 hour staining protocol
701310	TMRE Mitochondrial Membrane Potential Assay Kit	Mitochondrial membrane potential	Fluorescence plate reader	<1 hour staining protocol

## Cell Proliferation

Item No.	Product Name	Measure	Readout	Time to Results
10009349	Cell Cycle Phase Determination Kit	Cell cycle progression	Flow cytometer	~3 hours
10009853	CFSE Cell Division Assay Kit	Up to eight cell divisions in activated lymphocytes	Flow cytometer	<2 hour staining protocol
10009365	MTT Cell Proliferation Assay Kit	Cell viability and proliferation in cultured cells	Colorimetric plate reader	8-22 hours
10008883	WST-1 Cell Proliferation Assay Kit	Cell viability and proliferation in cultured cells	Colorimetric plate reader	2-4 hours
10010199	WST-8 Cell Proliferation Assay Kit	Cell viability and proliferation in cultured cells	Colorimetric plate reader	2-4 hours
10010200	XTT Cell Proliferation Assay Kit	Cell viability and proliferation in cultured cells	Colorimetric plate reader	~4 hours

## Cytotoxicity

Item No.	Product Name	Measure	Readout	Time to Results
600120	7-AAD/CFSE Cell-Mediated Cytotoxicity Assay Kit	Cytotoxicity in immune effector cells	Flow cytometer	6-7 hours
700410	ATP Detection Assay Kit – Luminescence	Total ATP levels in cell lysates	Luminescence plate reader	<30 minutes
600140	Autophagy/Cytotoxicity Dual Staining Kit	Regulation of autophagy and cytotoxicity in cultured cells	Fluorescence microscope Fluorescence plate reader	20 minute staining protocol
601170	LDH Cytotoxicity Assay Kit	Drug-induced cytotoxicity in cultured cells	Colorimetric plate reader	30 minute reaction

## Mitochondrial Function

Item No.	Product Name	Measure	Readout	Time to Results
707002	Catalase Assay Kit	Catalase activity	Colorimetric plate reader	~2 hours
10009172	JC-1 Mitochondrial Membrane Potential Assay Kit	Mitochondrial membrane potential in whole cells	Fluorescence microscope Fluorescence plate reader	<1 hour staining protocol
701560	JC-1 Mitochondrial Membrane Potential Flow Cytometry Assay Kit	Mitochondrial membrane potential	Flow cytometer	15 minute staining protocol
701040	MitoCheck® Citrate Synthase Activity Assay Kit	Citrate synthase activity in isolated mitochondria, tissue, or cell homogenate	Colorimetric plate reader	20 minutes
700930	MitoCheck® Complex I Activity Assay Kit	Complex I activity in isolated mitochondria	Colorimetric plate reader	15 minutes
700940	MitoCheck® Complex II Activity Assay Kit	Complex II activity in isolated mitochondria	Colorimetric plate reader	15 minutes
700950	MitoCheck® Complex II/III Activity Assay Kit	Complex II/III activity in isolated mitochondria	Colorimetric plate reader	15 minutes
700990	MitoCheck® Complex IV Activity Assay Kit	Complex IV activity in isolated mitochondria	Colorimetric plate reader	15 minutes
701000	MitoCheck® Complex V Activity Assay Kit	Complex V activity in isolated mitochondria	Colorimetric plate reader	30 minutes
601430	Mitochondrial PT Pore Assay Kit	Simultaneous mitochondrial membrane integrity and membrane potential	Flow cytometer Fluorescence microscope	15 minute staining protocol
701600	Mitochondrial ROS Detection Assay Kit	Mitochondrial ROS directly in living cells	Flow cytometer Fluorescence microscope	2 hours
600800	Oxygen Consumption Rate Assay Kit	OCR in whole cells	Fluorescence plate reader	~2 hours
601290	ROS Detection Cell-Based Assay Kit (DHE)	ROS in living cells	Flow cytometer	~1.5 hours
601520	ROS Detection Cell-Based Assay Kit (DCFDA)	ROS in living cells	Flow cytometer	<2 hours
701310	TMRE Mitochondrial Membrane Potential Assay Kit	Mitochondrial membrane potential in whole cells	Fluorescence plate reader	<1 hour staining protocol

To view our complete list of our assay kits, visit us online at [www.caymanchem.com](http://www.caymanchem.com)