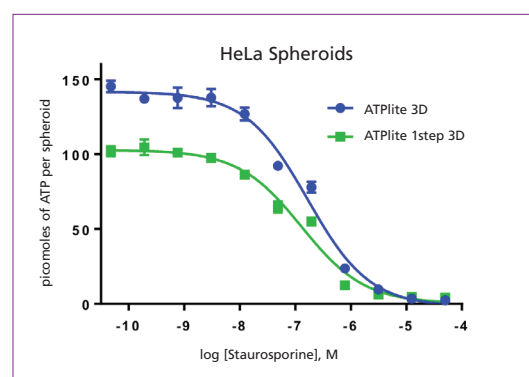


ADD A NEW DIMENSION  
**TO YOUR  
 RESEARCH**

## Introducing luminescence detection of ATP from cells cultured in 3D

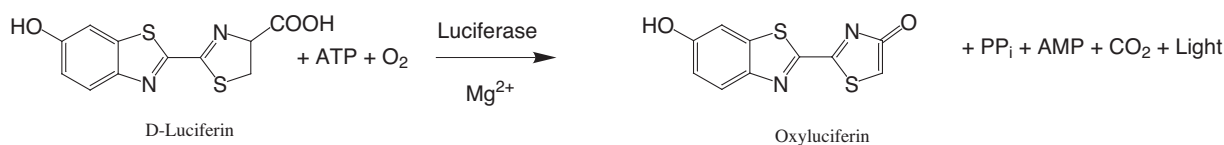
- **Highly Sensitive, Wide Dynamic Range** – Detect as few as 5 cells/well and spheroids of up to 5,000 cells/well
- **Simple and Reproducible Assays** – Better than fluorescence technologies, no need to transfer spheroids before lysis
- **Improved Temperature Stability** – Shipped at room temperature, no dry ice disposal needed
- **No Need to Thaw** – Products are stored at 4 °C: quickly ready for use, and save on freezer space!
- **No Need to Work Under the Chemical Hood** – No DTT means safer for user and environment and no smell
- **Cost-effective** – Priced economically against competition; long shelf life facilitates stock management and reduces scraping costs



Measurement of staurosporine toxicity on HeLa cells using the ATPlite 3D assay kits.

## ATPlite 3D: A new DTT-free method for measuring cell viability in 3D cell culture models

Cytotoxicity, cell viability, and cell proliferation are important parameters to monitor when developing new therapeutics. For almost 20 years, PerkinElmer has offered two options for the measurement of cellular levels of Adenosine Tri-Phosphate (ATP) from mammalian cell monolayers, as a marker of cell viability and proliferation. Both the **ATPlite®** and **ATPlite 1step** assays (2D and 3D) are based on the production of light caused by the reaction of cellular ATP with added firefly (*Photinus pyralis*) luciferase and D-luciferin.



More recently, scientific evidence shows that 3D cell culture represents a more physiologically-relevant model for the better prediction of cytotoxicity. PerkinElmer introduces the **ATPlite 3D** and **ATPlite 1step 3D** Luminescence Assays Systems for the specific analysis of the viability and cell growth in **3D spheroid\*** cultures.

\* Please refer to the PerkinElmer CellCarrier Spheroid ULA 96-well microplates manual to learn how to easily grow spheroids

## ATPlite Cytotoxicity and Cell Proliferation Assays: Choose the right detection reagents based on your application

Product	Half-life	Sample Type	Key Features	Kit Size	No. of Datapoints			Part No.
					96-w	384-w	1536-w	
<b>2D APPLICATIONS</b>								
ATPlite1step	30 min	Monolayer, Suspension	<ul style="list-style-type: none"> <li>• True "Mix and Measure" continuous processing</li> <li>• 3x more light output than ATPlite</li> <li>• Measure within 30 min</li> </ul>	10 mL	100	400	3,300	6016736
				100 mL	1,000	4,000	33,000	6016731
				1,000 mL	10,000	40,000	333,000	6016739
ATPlite	5 h	Monolayer, Suspension	<ul style="list-style-type: none"> <li>• Two-step assay format</li> <li>• Unsurpassed signal stability is ideal for large batch processing</li> <li>• Cell lysates can be stored frozen for later testing</li> </ul>	300 Assays	300	1,200	9,900	6016943
				1,000 Assays	1,000	4,000	33,000	6016941
				5,000 Assays	5,000	20,000	165,000	6016947
				10,000 Assays	10,000	40,000	333,000	6016949
<b>3D APPLICATIONS</b>								
ATPlite 1step 3D	30 min	Spheroids	<ul style="list-style-type: none"> <li>• Single addition step</li> <li>• 3x more light output than ATPlite 3D</li> <li>• Measure within 30 min</li> </ul>	100 Assays	100	400	-	6066736
ATPlite 3D	5 h	Spheroids	<ul style="list-style-type: none"> <li>• Two addition steps</li> <li>• Best lysis efficiency</li> <li>• Cell lysates can be stored frozen for later testing</li> <li>• Less light output, but similar Z' values</li> </ul>	300 Assays	300	1,200	-	6066943

- All kits include at least one ATP standard vial
- ATPlite 1step 10 mL includes a 96-well CulturPlate™ with a lid
- The ATPlite 1step 3D and ATPlite 3D kits include a CellCarrier™ Spheroid ULA 96-well microplate, an OptiPlate™ 96-HS microplate, and 4 TopSeal-A PLUS clear adhesive microplate seals

For more information, please visit:  
[www.perkinelmer.com/category/luminescence-assays](http://www.perkinelmer.com/category/luminescence-assays)  
[www.perkinelmer.com/category/drug-discovery-reagents](http://www.perkinelmer.com/category/drug-discovery-reagents)

Complementary PerkinElmer Products	Part No.
CellCarrier Spheroid ULA 96-well Microplates	6055330 (10 lidded, individually-wrapped plates)
	6055334 (40 lidded plates - two bags with 20/bag)
Optiplates, 96-well HS (Gray)	6005330 (case of 50)
	6005339 (case of 200)
Optiplates, 384-well HS (Gray)	6005310 (case of 50)
	6005300 (case of 200)
TopSeal-A PLUS microplate seals	6050185 (box of 100)

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For a complete listing of our global offices, visit [www.perkinelmer.com/ContactUs](http://www.perkinelmer.com/ContactUs)

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