See your research in a new light.

Luminescence assays

Luciferase assays allow for the study of transcriptional gene expression, virus life cycles, cell viability, and biochemical processes making them significant tools for drug development. Whether are you looking for a reporter gene, ATP detection, our luciferase luminescence assay options provide high sensitivity in a convenience microplate format.

A luminescence assay is extremely useful as a detection platform for several reasons, including:

- Wide dynamic range
- Greater sensitivity than fluorescence technologies
- Lower interference than other detection options
- Simple automation for high throughput applications
- Homogeneous luciferase assay set-up eliminates wash and separation steps
- Hassle-free storage

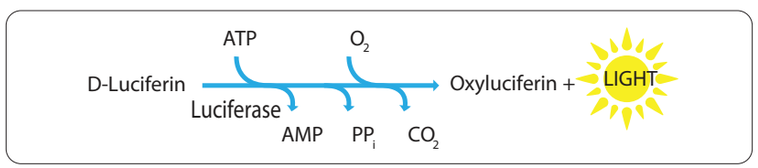

Figure 1. Chemical reaction of luminescence assays.

Reporter gene assays	Cytotoxicity and cell proliferation assays
britelite® plus	ATPlite
steadylite™ plus	ATPlite 1step
neolite™	ATPlite 3D
sensilite™	ATPlite 3D 1step
twinlite™	
twinlite™ glow	

Reporter gene assays

Reporter gene assays enable high sensitivity measurement of gene expression and cell signaling through the addition of bioluminescent genes into target cells. Whether your assay requires the sensitivity provided by high signal intensity, or the flexibility of an extended signal half-life, Revvity offers a reporter gene assay to suit.

	britelite® plus *intensively sensitive*	steadylite™ plus *long-lived glow*	neolite™ *bright and stable*	sensilite™ *ultra sensitive*	twinlite™ *dual luciferase assay*	twinlite™ glow *dual glow luciferase assay*
Application	Firefly luciferase reporter gene assays				Firefly and renilla luciferase reporter gene assays	Firefly and Renilla Luciferase Reporter Gene Assays
Half-life	0.5 hours	4-5 hours	2.5 hours	Flash	Flash	2 hours
Relative sensitivity	High	Moderate	Moderate	Very high	Very high	Moderate
Microplate formats	96, 384, 1536 wells	96, 384, 1536 wells	96, 384, 1536 wells	96, 384 wells	96, 384 wells	96, 384 wells
Ideal for	Low transfection efficiencies, stem cell transfection, continuous processing	High-throughput screening, extended batch processing	Low transfection efficiencies, primary cell transfection, batch processing	Low transfection efficiency, stem cell transfection	Normalization for high quality data, screen two events in parallel	Normalization for high quality data, screen two events in parallel without the use of injectors

For more information on our luminescence assays please visit www.revvity.com/lites

Cytotoxicity and cell proliferation assays

Cytotoxicity and cell proliferation assays are commonly used in the drug discovery process to assess a compound's ability to cause or block a biologic activity without having toxic effects on cells. Adenosine TriPhosphate (ATP) – monitoring assays allow for the quantitative evaluation of proliferation and cytotoxicity.

	ATPlite *extended signal stability*	ATPlite 1step *single addition assay*	ATPlite 3D *for 3D sheroids*	ATPlite 3D 1step *single addition assay for 3D sheroids*
Application	Cytotoxicity and cell proliferation assays		Cytotoxicity and cell proliferation assays in 3D cultured mammalian cells	
Half-life	At least 5 hours	0.5 hour	At least 5 hours	0.5 hour
Relative Sensitivity	Very High	Very High	High	High
Microplate Format	96, 384 wells	96, 384 wells	96 wells	96 wells
Protocol	2-step	1-step	2-step	1-step
Ideal for	Batch processing	Continuous processing	Batch processing	Continuous processing

For research use only. Not for use in diagnostic procedures.