



Glowing products for science

ATP-Glo™ Bioluminometric Cell Viability Assay

ATP-Glo™ Bioluminometric Cell Viability Assay offers a highly sensitive assay for quantifying ATP. The homogeneous assay involves a single addition of ATP-Glo™ Detection Cocktail directly to cells in culture medium.



Product Description

See our updated and improved ATP-Viability Assay!

Biotium now offers a glow-type [Steady-ATP™ HTS Viability Assay Kit](#) for sensitive and stable detection of cellular ATP. The kit is an improved replacement for the ATP-Glo™ kit and offers a half-life longer than 5 hours and a linear signal over 3-4 orders of magnitude. The extended half-life provides flexibility for high-throughput screening (HTS) platforms.

ATP-Glo™ Bioluminometric Cell Viability Assay offers a highly sensitive assay for quantifying ATP. The homogeneous assay procedure involves simply adding the ATP-Glo™ detection cocktail directly to cells cultured in complete culture medium. It is not necessary to remove medium or wash cells before adding the reagent.

This ATP detection kit takes advantage of firefly luciferase's use of ATP to oxidize D-Luciferin and the resulting production of light in order to assess the amount of ATP available. Because ATP is an indicator of metabolically active cells, the number of viable cells can be assessed based on the amount of ATP present.

The ATP-Glo™ kit can be used to detect as little as a single cell or 0.01 picomole of ATP. The signal produced is linear within 6 orders of magnitude. By relating the amount of ATP to the number of viable cells, the assay has wide applications, ranging from the determination of viable cell numbers to cell proliferation to cell cytotoxicity.

Call us : [800-304-5357](tel:800-304-5357)

Product attributes

Apoptosis/viability marker	Metabolic activity
For live or fixed cells	Cell lysis required
Assay type/options	Endpoint assay, Homogeneous assay, Luminescence (flash-type)
Detection method/readout	Luminometer (single-tube or microplate reader with reagent injectors)
Product origin	Firefly luciferase; recombinant, produced in E. coli
Storage Conditions	Store at -60 °C or below

More Luciferase Kits

Biotium Cat. No.	Product	Description	Promega Assay	Promega Cat. No.
30138	Steady-ATP™ HTS Viability Assay Kit	Highly sensitive ATP-based cell luminescent viability assay with signal half-life of 5 hours for high-throughput screening in multi-well plates.	CellTiter-Glo® Luminescent Cell Viability Assay	G7570, G7571, G7572, G7573
30085	Firefly Luciferase Assay Kit 2.0	Flash-type firefly luciferase assay kit.	Firefly Luciferase Assay System	E1483, E1500, E1501, E4030, E4530, E4550
30075	Firefly Luciferase Assay Kit (Lyophilized)	Firefly luciferase assay kit with lyophilized assay buffer for economical room temperature shipping and convenient storage at -20°C.		
30028	Steady-Luc&#153; Firefly HTS Assay Kit	Glow-type firefly luciferase assay with signal half-life of about 3 hours for high-throughput screening in multi-well plates.	Steady-Glo® Assay System	E2510, E2520, E2550
30028L	Steady-Luc Firefly HTS Assay Kit (Lyophilized)	Steady-Luc kit with lyophilized assay buffer for economical room temperature shipping and convenient storage at -20°C.		
30082	Renilla Luciferase Assay Kit 2.0	Flash-type Renilla luciferase assay kit.	Renilla Luciferase Assay System	E2810, E2820
30081	Firefly and Renilla Luciferase Single Tube Assay Kit	Assay kit for measuring firefly and Renilla activities sequentially in the same sample in a single tube.	Dual-Luciferase® Assay System (Firefly & Renilla)	E1910, E1960, E1980

References

- PNAS (2008) 105(32), 11218-11223. <https://doi.org/10.1073/pnas.0801661105>
- Biochim Biophys Acta. (2009) 1790(3), 208-212. [doi:10.1016/j.bbagen.2008.12.005](https://doi.org/10.1016/j.bbagen.2008.12.005)
- J Biol Chem (2012) 287(47), 39776-39788. [DOI 10.1074/jbc.M112.382986](https://doi.org/10.1074/jbc.M112.382986)
- Dalton Trans (2014) 43, 8395-8404. <https://doi.org/10.1039/C4DT00024B>
- J Biol Chem (2014) 289(23), 16278-16289. [DOI 10.1074/jbc.M114.559914](https://doi.org/10.1074/jbc.M114.559914)
- Oncotarget (2015) 6(16), 14233-46. <https://doi.org/10.18632/oncotarget.3899>
- Oncotarget (2016) 7(7), 8399-412. [doi: 10.18632/oncotarget.6724](https://doi.org/10.18632/oncotarget.6724)
- BBA - Mol Basis Disease (2017) 1863, 2171-2181. <https://doi.org/10.1016/j.bbadis.2017.06.004>
- Cell Death Disease (2017) 8, e3081. [doi:10.1038/cddis.2017.453](https://doi.org/10.1038/cddis.2017.453)
- Mol Neurobiol (2017) 54, 6107-6119. <https://doi.org/10.1007/s12035-016-0145-3>
- Front Oncol (2018) 8, 552. [doi: 10.3389/fonc.2018.00552](https://doi.org/10.3389/fonc.2018.00552)
- Int J Biol Sci (2018) 14(13), 1873-1882. [doi: 10.7150/ijbs.27746](https://doi.org/10.7150/ijbs.27746)
- J Cell Mol Med (2018) 22, 5720-5731. [DOI: 10.1111/jcmm.13848](https://doi.org/10.1111/jcmm.13848)
- Mol Neurobiol (2018) 55, 9139-9155. <https://doi.org/10.1007/s12035-018-1062-4>
- Mol Cell Neurosci (2019) 96, 1-9. <https://doi.org/10.1016/j.mcn.2019.01.003>

This datasheet was generated on June 7, 2026 at 06:05:28 PM. Visit product page to check for updated information before use.

Product link: <https://biotium.com/product/atp-glotm-bioluminometric-cell-viability-assay/>