

IncuCyte® NuLight Green BacMam 3.0 Reagent for Nuclear Labeling

Transiently transduce cells with a nuclear restricted fluorescent label.

Presentation, storage and stability

The IncuCyte® NuLight Green BacMam 3.0 Reagent is supplied as a 1 mL vial of virus at a concentration of approximately 1×10^8 viral particles per mL sufficient for transducing five to ten 96-well microtiter plates at 1 to 2% (v/v). The IncuCyte NuLight BacMam 3.0 reagent should be stored at +4°C and away from light. Do not freeze. When stored as described, the IncuCyte® NuLight BacMam 3.0 reagent will be stable for at least 6 months from the date of receipt.

Background and intended use

The IncuCyte NuLight Green BacMam 3.0 Reagent enables efficient, non-perturbing, nuclear labeling of living mammalian cells. It is compatible with simple mix-and-read protocols, and enables real-time cell counting and the calculation of cell doubling times. The IncuCyte NuLight Green BacMam 3.0 Reagent enables the rapid expression of a nuclear-restricted GFP (green fluorescent protein) in your choice of primary, immortalized, dividing or non-dividing mammalian cells without altering cell function and with minimal toxicity. The IncuCyte NuLight Green BacMam 3.0 Reagent can be easily used to transiently transduce your choice of cells eliminating the need to create stable cell lines. The NuLight BacMam 3.0 Reagent has been validated for use with the IncuCyte® S3 live cell imaging platform and enable real-time cell counting. Furthermore, the IncuCyte NuLight Green BacMam 3.0 Reagent can be combined with the IncuCyte® S3 and our range of IncuCyte® Cytotox Reagents or the IncuCyte® Caspase 3/7 reagent for multiplexed measurements of cytotoxicity and apoptosis alongside proliferation in a single well.

Recommended use

The IncuCyte NuLight Green BacMam 3.0 Reagent should be stored at +4°C and away from light (do not freeze). We recommend that the IncuCyte NuLight BacMam 3.0 Reagent is prepared in full media at a concentration of 1 to 2% (v/v) depending on the number of cells being seeded and the cell type being infected. For efficient transduction cells can be resuspended in media containing the IncuCyte NuLight BacMam 3.0 Reagent prior to seeding. Alternatively if cells have already been plated, a full media exchange may be performed with media containing the IncuCyte NuLight BacMam 3.0 Reagent to infect cells. When used in an IncuCyte® S3 live cell imaging system, we recommend data collection every 2 hours for proliferation assays. Please see the relevant protocol published on our website:

essenbioscience.com/nuflight

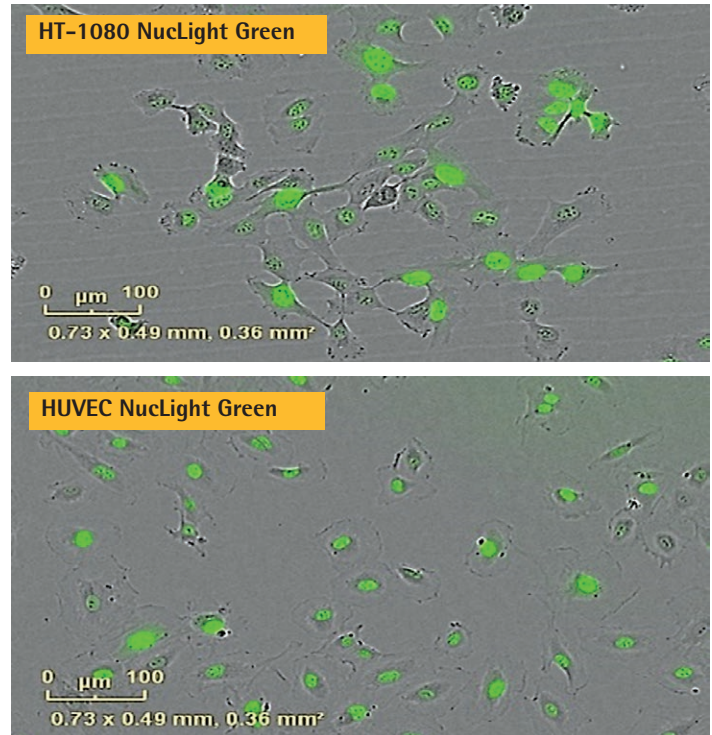


Figure 1. Representative images of primary (HUVEC) and tumor (HT-1080) cell types transduced using the IncuCyte® NuLight Green BacMam Green 3.0 Reagent. Note the nuclear restricted expression of or green fluorescent protein (GFP) and the healthy cell morphology.

Safety data sheet (SDS) information

The SDS can be found on our website: essenbioscience.com/nuilight

Quick Guide


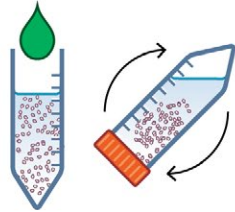
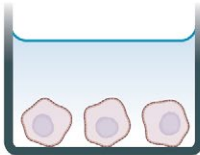
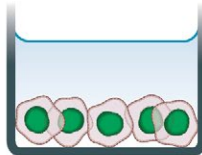
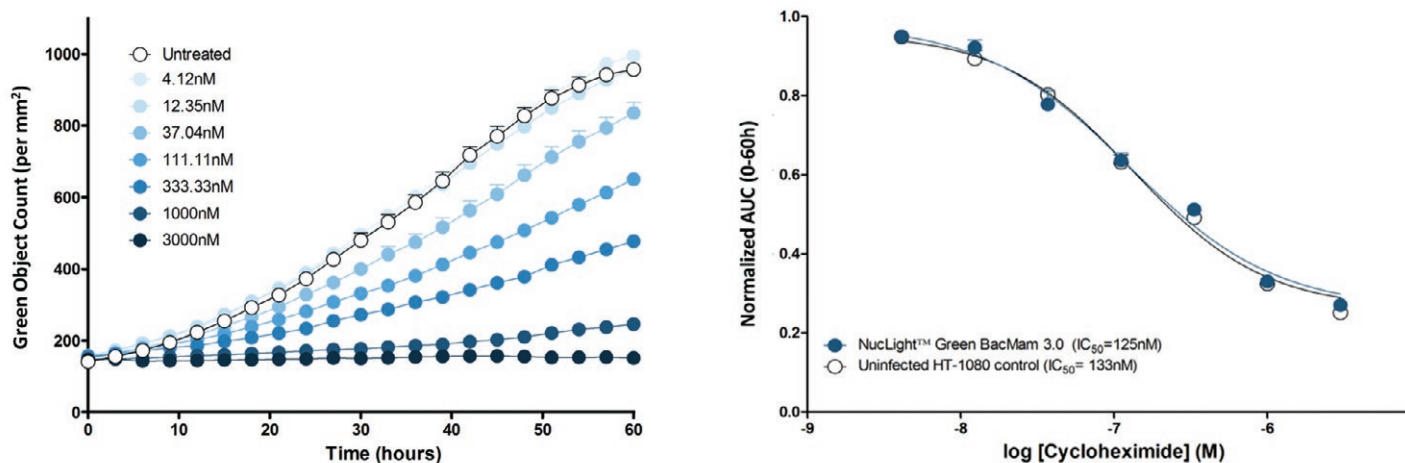
<p>1 HARVEST CELLS</p>  <p>Prepare Cell Seeding Stock Harvest cells and resuspend at 2×10^4 cells/mL in full growth medium.</p>	<p>2 TRANSDUCE</p>  <p>Add IncuCyte® NuLight Green BacMam 3.0 Reagent (1 to 2% (v/v)). Mix by inversion.</p>	<p>3 SEED CELLS</p>  <p>Seed cells (100µL/well, 2×10^3 cells/well) and incubate at ambient temperature for 30 minutes.</p>	<p>4 LIVE CELL FLOURESCENT IMAGING</p>  <p>Automated Imaging and Quantitative Analysis Capture images every 1 to 2 hours (4x, 10x or 20x) in an IncuCyte® ZOOM system. Analyze using integrated software.</p>
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Figure 2. Concentration-dependent inhibition of proliferation by cycloheximide in HT-1080 fibrosarcoma cells labeled with the IncuCyte® NuLight Green BacMam 3.0 Reagent.



FOR RESEARCH ONLY. NOT FOR THERAPEUTIC OR DIAGNOSTIC USE.

Product	Cat No.	Promoter	Lot #	Viral Titer	Amount	Ex. Maxima	Em. Maxima
IncuCyte® NuLight Green BacMam 3.0 Reagent	4622	CMV	F15448	2.0×10^9 pfu/mL	1 mL	483 nm	506 nm