



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC Handels GmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

# IncuCyte™ pHrodo® Bioparticles® for Phagocytosis

## Presentation, storage and stability

IncuCyte™ pHrodo® Bioparticles® for Phagocytosis are supplied as lyophilized solid in sufficient quantity capable of performing 100-200 tests (1 test = 1 well of 96-well microtiter plate). The lyophilized solid should be stored at -20°C and once solubilized the suspension should be stored at +4°C. When stored as described the lyophilized solid will be stable for at least 6 months and the suspension for at least 1 month.

## Background and intended use

IncuCyte™ pHrodo® Bioparticles® are sterile fluorogenic reagents ideally suited to a simple mix-and-read, real-time live cell quantification of phagocytosis. The unique pHrodo®-based system exploits the acidic environment of the phagosome to quantify phagocytosis. As IncuCyte™ pHrodo® Bioparticles® residing in the neutral extracellular solution (pH 7.4) are engulfed by phagocytes and enter the acidic phagosome (pH 4.5 – 5.5), a substantial increase in fluorescence is observed. Application of IncuCyte™ pHrodo® Bioparticles to non-phagocytic cells yields little or no fluorescent signal. With the IncuCyte ZOOM® integrated analysis software background fluorescence is minimized. These fully sterilized reagents have been validated for use with the IncuCyte ZOOM® live cell imaging platform and enable real-time evaluation of phagocytic regulation by pharmacological agents as well as genetic and environmental factors.

## Recommended use

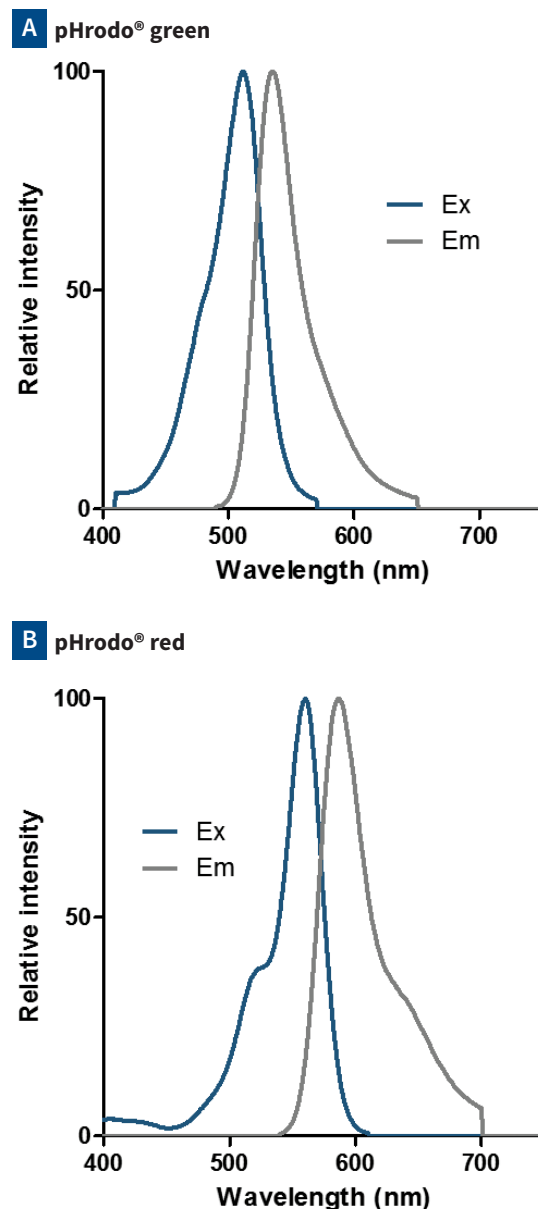
We recommend that IncuCyte™ pHrodo® Bioparticles® are prepared at a stock concentration of 1 mg per mL in full media or PBS. The bioparticles may then be diluted for direct addition to cells seeded in a 96-well plate to yield 10 µg per well (for E. coli and S. aureus) or 5 µg per well (for Zymosan). When used in an IncuCyte ZOOM® live cell imaging system we recommend data collection every 15 minutes.

Please see the relevant protocol published on our website:

[essenbioscience.com/phagoprotocols](http://essenbioscience.com/phagoprotocols)

## Safety data sheet (SDS) information

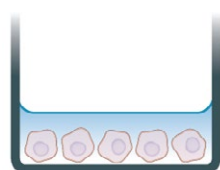
The SDS can be found on our website  
[essenbioscience.com/phagocytosis](http://essenbioscience.com/phagocytosis)



**Figure 1.** Excitation and emission spectra for the (A) pHrodo® green and (B) pHrodo® red fluorophores, determined in pH 4.0 buffer.

## Quick guide

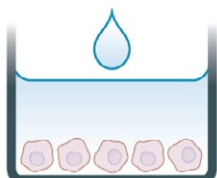
### 1 SEED TARGET CELLS



#### Phagocyte Cell Seeding

Seed phagocytes (50  $\mu$ L/well,  $1 \times 10^3$  to  $1 \times 10^4$  cells/well) into the 96-well plate and leave to adhere (2 - 16 h).

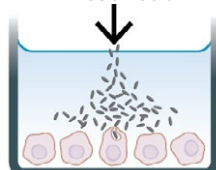
### 2 TREAT CELLS



#### Activator/Inhibitor or Molecular Intervention

Add the desired treatments (25  $\mu$ L/well) at 4x final assay concentrations.

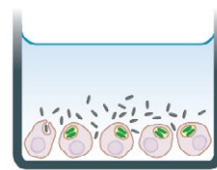
### 3 ADD INCUCYTE™ PHRODO® BIOPARTICLES® FOR PHAGOCYTOSIS



#### IncuCyt™ pHrodo® Bioparticles® Addition

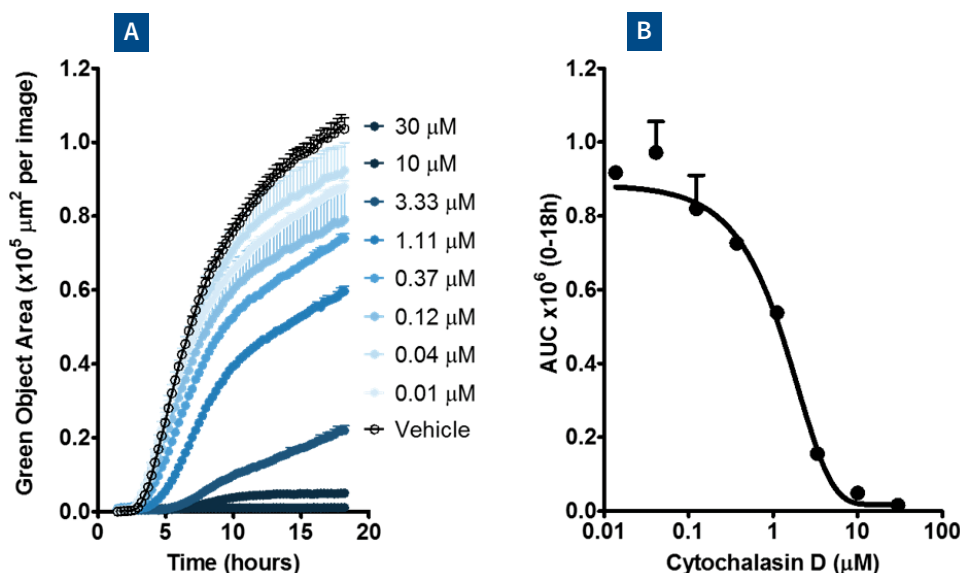
Add your choice of Bioparticle® (e.g. *E. coli*, *S. aureus*, Zymosan) to the 96-well plate (approximately 10  $\mu$ g per well depending on Bioparticle; 25  $\mu$ L/well at 4x final assay concentrations).

### 4 LIVE CELL FLUORESCENT IMAGING



#### Automated Imaging and Quantitative Analysis

Capture images every 10-30 minutes (20x or 10x) in IncuCyt ZOOM® for 2-48 hours. Analyze using integrated software.



**Figure 2. Concentration-dependent attenuation of IncuCyt® pHrodo® Green *E. coli* Bioparticles® phagocytosis by the actin polymerization inhibitor cytochalasin D in J774A.1 murine macrophages.**

**(A)** Time-course of phagocytosis in the absence (open symbols) and increasing concentrations of cytochalasin D (progressively darker blue symbols). Phagocytosis has been quantified as the fluorescence area for each time-point. **(B)** Concentration response curve to cytochalasin D. Area under the curve (AUC) values have been determined from the time-course shown in panel A (0 - 18 hours) and are presented as the mean  $\pm$  SEM, n=3 wells.

**FOR RESEARCH USE ONLY. NOT FOR THERAPEUTIC OR DIAGNOSTIC USE.**

Product	Cat No.	Amount	Ex. maxima	Em. maxima
IncuCyt™ pHrodo® Red <i>E. coli</i> Bioparticles®	4615	2 mg	560 nm	585 nm
IncuCyt™ pHrodo® Green <i>E. coli</i> Bioparticles®	4616	2 mg	509 nm	533 nm
IncuCyt™ pHrodo® Red Zymosan Bioparticles®	4617	1 mg	560 nm	585 nm
IncuCyt™ pHrodo® Green Zymosan Bioparticles®	4618	1 mg	509 nm	533 nm
IncuCyt™ pHrodo® Red <i>S. aureus</i> Bioparticles®	4619	2 mg	560 nm	585 nm
IncuCyt™ pHrodo® Green <i>S. aureus</i> Bioparticles®	4620	2 mg	509 nm	533 nm

## Product label licence

### RESEARCH Field

This product is provided under an intellectual property license from Life Technologies Corporation. The transfer of this product is conditioned on the buyer using the purchased product solely in research conducted by the buyer, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad, CA 92008 USA or outlicensing@lifetech.com.