

# Phagocytosis Assay Kit

**Cat. No.** Kit-2102    **Lot. No.** (See product label)

## SPECIFICATION

**Product Overview**      Phagocytosis Assay Kit (Green Zymosan) utilizes pre-labeled Zymosan particles as a tool for rapid and accurate detection and quantification of in vitro phagocytosis by fluorescent microscope, spectrophotometer or flow cytometry. Our kit provides a robust screening system for activators and/or inhibitors of phagocytosis and Tolllike receptors ligands (TLR).

**Size**      100 assays

**Description**      Phagocytosis in mammals serves as an important first line defense mechanism against invading pathogens. It is also essential for continuous clearance of dying cells, tissue remodeling, and acquisition of nutrients for some cells. Phagocytosis is a specific form of endocytosis initiated by recognition and binding of foreign particles by cell surface receptors, followed by their engulfment, and formation of phagosomes. Maturing phagosomes transform to phagolysosomes which destroy the pathogen through enzymes and toxic peroxides. Zymosan prepared from yeast cell wall (*Saccharomyces cerevisiae*), and consisting of protein-carbohydrate complexes is frequently used as a pathogen in phagocytosis assays.

**Applications**      Rapid detection, quantification and validation of phagocytosis in convenient 96-well format  
Tracking ligand internalization and screening for effectors of phagocytosis

**Target Species**      Mammalian

**Storage**      Store the entire kit at 4°C protected from light. Read the entire protocol before

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performing the assay. Green Zymosan: Before each use, equilibrate the suspension to room temperature and vortex gently for 5 seconds. Quenching Solution: Dilute the content of the vial into 4.5 ml of 1X Phagocytosis Assay Buffer.

**Kit Components**

Phagocytosis Assay Buffer: 2 X 90 ml  
Green Zymosan: 600 µl  
10X Quenching Solution: 500 µl

**Detection method**

Fluorescence (Ex/Em = 490/520 nm)

**Compatible Sample Types**

Phagocytic cell culture: adherent or suspension cells capable of phagocytosis

**Features & Benefits**

- Simple & Rapid Protocol
- Convenient: Non-Radioactive, no special handling or disposal required
- High-Throughput

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