abcam

Product datasheet

Phagocytosis Assay Kit (Green *E.coli*) ab235900

3 Images

Overview

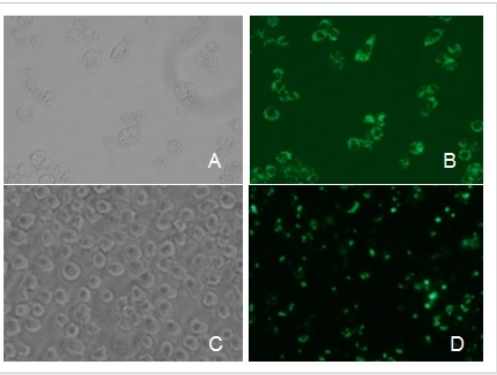
Product name	Phagocytosis Assay Kit (Green *E.coli*)
Detection method	Fluorescent
Sample type	Adherent cells, Suspension cells
Product overview	Phagocytosis Assay Kit (Green *E. coli*) (ab235900) utilizes heat-killed, fluorescently pre-labeled *E. coli* particles as a tool for rapid and accurate detection and quantification of in vitro phagocytosis by fluorescent microscope, spectrophotometer or flow cytometry. The kit provides a robust screening system for activators and/or inhibitors of phagocytosis and Toll-like receptor (TLR) ligands.
Notes	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. *E. coli* and other bacterial strains are often used as a pathogen in phagocytosis assays.
Platform	Microplate reader, Fluor. microscope, Flow cyt.

Properties

Storage instructions	Store at +4°C. Please refer to protocols.

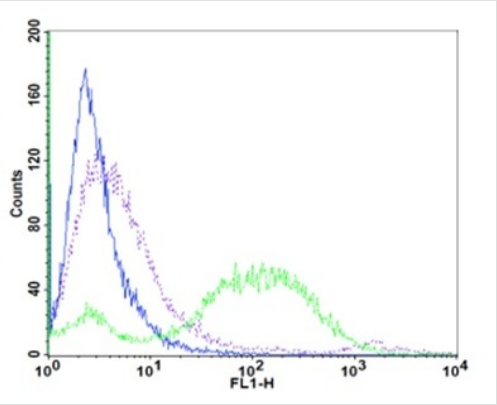
Components	100 tests
10X Quenching Solution	1 x 500µl
Buffer Additive	2 x 1ml
Green *E. coli*	1 x 600µl
Phagocytosis Assay Buffer	2 x 100ml

Images



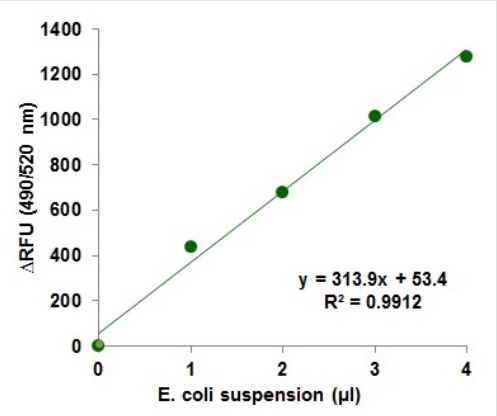
Inhibition of phagocytosis.

J774 macrophages were seeded overnight at 5 x 10^5 of viable cells/well. The next day the cells were pretreated with 20 µM Cytochalasin D for 1 hour at 37ºC prior to addition of 5 µL of *E. coli* particles. Phagocytosis was conducted for 2 hours and the amount of engulfed *E. coli* was determined as described in the Assay Protocol. Panel A and B: images of nontreated cells. Panel C and D: treatment with Cytochalasin D.



Flow cytometry plot.

J774 macrophages were seeded overnight at 5 x 10^5 of viable cells/well. The next day the cells were pretreated with 20 µM Cytochalasin D for 1 hour at 37ºC prior to addition of 5 µL of *E. coli* particles. Phagocytosis was conducted for 2 hours and the amount of engulfed *E. coli* was determined as described in the Assay Protocol. Blue line: untreated control cells; green line: macrophages with engulfed *E. coli* particles; violet line: inhibition of phagocytosis by Cytochalasin D.



E. coli Standard curve.

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