

## CytoSelect 96-Well Phagocytosis Assay (E. coli, Colorimetric Format) Assay Kit

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CATALOG #  
AAA11422

### PRODUCT SYNONYMS

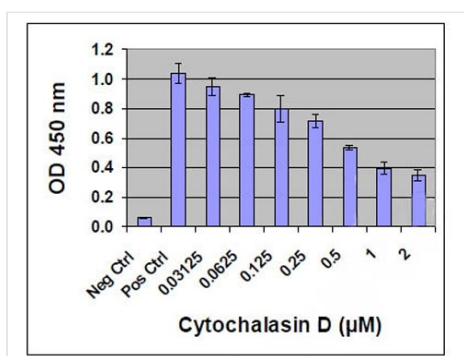
CytoSelect 96-Well Phagocytosis Assay (E. coli; Colorimetric Format); Colorimetric Format) assay kit

### PRODUCT SPECIFICATIONS

#### Preparation and Storage

Upon receipt, aliquot and store the E. coli Suspension at -20 degree C to avoid multiple freeze/thaw cycles. Store all other kit components at 4 degree C until their expiration dates.

### IMAGES



Standard Curve (Sample)

### ADDITIONAL INFORMATION

#### Related Product Information for CytoSelect 96-Well Phagocytosis Assay (E. coli, Colorimetric Format) assay kit

Background: In mammals, phagocytosis by phagocytes (e.g., macrophages, dendritic cells, and neutrophils) is essential for a variety of biological events, including tissue remodeling and the continuous clearance of dying cells. Furthermore, phagocytosis represents an early and crucial event in triggering host defenses against invading pathogens. Phagocytosis comprises a series of events, starting with the binding and recognition of particles by cell surface receptors, followed by the formation of actin-rich membrane extensions around the particle. Fusion of the membrane extensions results in phagosome formation, which precedes phagosome maturation into a phagolysosome. Pathogens inside the phagolysosome are destroyed by lowered pH, hydrolysis, and radical attack (Figure 1). These early events that are mediated by the innate immune system are critical for host survival. As a result of this process, pathogen-derived molecules can be presented at the cell surface (antigen presentation), allowing the induction of acquired immunity. The CytoSelect™ 96-well Phagocytosis Assay (E. coli) uses enzyme-labeled, E. coli particles as a phagocytosis pathogen; however, it does not involve subjective manual counting of E. coli particles inside cells. Instead, external particles are blocked before the colorimetric detection of engulfed E. coli particles (Figure 2). This format provides a quantitative, high-throughput method to accurately measure phagocytosis. The CytoSelect™ 96-well Phagocytosis Assay (E. coli) provides a robust system for screening TLR ligands, phagocytosis activators or inhibitors. Each kit provides sufficient quantities to perform 96, 48, 24 tests in a 96, 48, 24-well plate, respectively.

#### Product Categories/Family for CytoSelect 96-Well Phagocytosis Assay (E. coli, Colorimetric Format) assay kit

Cell Based Assays; Phagocytosis Assays

## References

1. Hornef, M.W. et al. (2002) Nat. Immunol. 3:1033-1040.
  2. Lei, B. et al. (2001) Nat. Med. 7:1298-1305.
  3. Ojielo, C.I. et al. (2003) J. Immunol. 171:4416-4424.
  4. Foukas, L.C. et al. (1998) J. Biol. Chem. 273:14813-14818.
  5. Grunwald, U. et al. (1996) J. Immunol. 157:4119-4125.
- Zhu, X. et al. (2014). Deletion of Class A Scavenger Receptor Deteriorates Obesity-Induced Insulin Resistance in Adipose Tissue. Diabetes. 63:562-577.

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/assay-kits/cytoselect-96-well-phagocytosis-assay-e-coli-colorimetric-format/11422>