



Neutrophil (mouse) Isolation Kit

Product Information

Cat.No.

Kit-1984

Size

1 ea

Description

Neutrophils are short-lived inflammatory cells that are highly adept at ingesting and destroying bacteria as part of the first line of defense in the innate immune response to many pathogenic organisms. They produce an extensive arsenal of defensive antimicrobial proteins and peptides including lysozyme, myeloperoxidase, neutrophil elastase, cathepsins, and the alpha- and beta-defensins. Neutrophils also form extracellular traps, web-like structures composed of DNA, histones, and various antimicrobial proteins that are extruded from the neutrophil in order to ensnare and kill extracellular pathogens. In mice, neutrophils comprise ~10% of circulating white blood cells, so unlike humans, it is usually not possible to isolate even one million neutrophils from a single mouse from peripheral blood. The Neutrophil (mouse) Isolation Kit provides a streamlined method for isolating mouse neutrophils by peritoneal lavage. Included in this kit are all the reagents necessary for inducing a sterile inflammatory response in the peritoneal cavities of up to five mice, the density separation medium required to separate the neutrophils from other peritoneal leukocytes, and the fluorochrome-labeled antibodies required to assess the success of the isolation procedure by flow cytometry.

Storage

-20°C

Kit Components

Sodium Caseinate Solution Assay Reagent (7.5%): 1 vial/5 ml; -20°C Percoll Gradient Assay Reagent (63%): 5 vials/5 ml; Room Temperature RBC Lysis Buffer (10X): 1 vial/10 ml; Room Temperature Bovine Serum Albumin Assay Reagent: 1 vial/5 g; 4°C Anti-Mouse Ly6G PE/CD11b FITC Reagent: 1 vial/1 ml; 4°C