V02

Mouse Peripheral Blood Neutrophil Isolation (Plus) Kit

Cat:P9204

Product Description

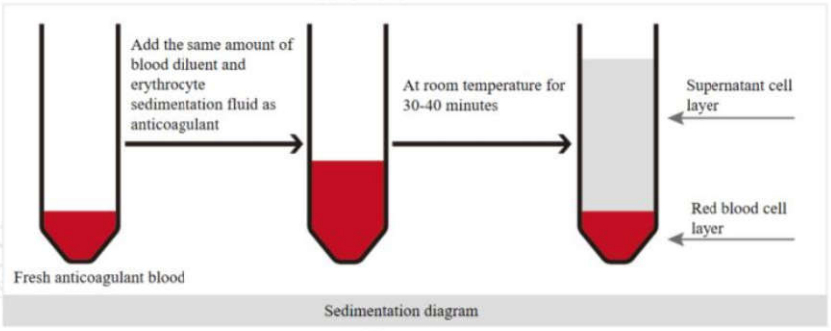
Compared with the conventional kit, this kit can further improve the separation purity of mouse peripheral blood neutrophils by optimizing the relevant components of the separation solution, and is more suitable for downstream experimental operations such as flow cytometry sorting.

Kit compositions

Kit components	Specifications	Storage conditions
Reagent A	200mL	2~8℃
Reagent B	100mL	2~8℃
Mouse erythrocyte sedimentation fluid	100mL	Room temperature
Red blood cell lysate	100mL	Room temperature
Cell washing solution	200mL	Room temperature

Protocols(*only for reference*)

1、 Removal of red blood cells by sedimentation: Take fresh anticoagulant blood and blood diluents (saline for injection or 1XPBS) and erythrocyte sedimentation in a 1:1:1 ratio, stand at room temperature for 30-40minutes, visible red blood cells sink in the bottom of the tube, carefully absorb the supernatant layer (rich in white blood cells and platelets) for subsequent cell separation.



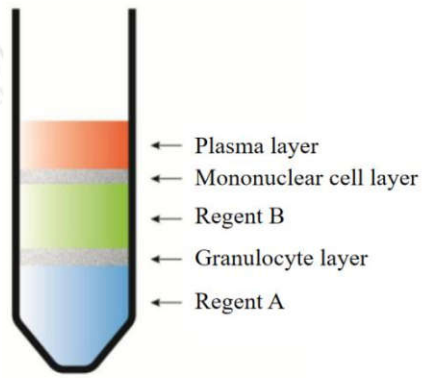
Sedimentation diagram

2、 Sample separation: Aeagent A to A 15mL centrifuge tube, and then slowly overlay 2mL of reagent B on top of reagent A along the wall of the tube (45° tilt test tube) to form a gradient interface. Carefully layer the suspension above the liquid level of the separation solution.Note that the total volume of separation solution and sample should not exceed two-thirds of the centrifuge tube, otherwise the separation effect will be affected.

3、 Horizontal rotor 600-1000g, 25-30minutes at room temperature (the larger the blood volume, the larger the centrifugal force required, the longer the centrifugation time, the best separation conditions need to explore, the maximum centrifugal speed does not exceed 1000g).

4、 After centrifugation, the upper tunica albuginea layer is the mononuclear cell layer, and the lower tunica albuginea layer is the granulocyte layer .

5、 The neutrophil layer were carefully sucked into a new centrifuge tube, and the cells were washed by adding 10mL of cell washing solution. 250g, centrifugation for 10minutes (If there is red blood cell contamination, add an



Separation schematic

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appropriate amount of red blood cell lysate according to the sample volume to remove the contamination).

6、 The supernatant was discarded, and the cells were resuspended by adding 5mL of cell washing solution. The cells were centrifuged at 250g for 10minutes.

7、 The supernatant was discarded and the cells were resuspended for later use.

Note

A. Mix it upside down before opening. This separation solution is a sterile product. In order to prolong the storage time of the separation solution, please unseal it under sterile conditions to avoid microbial contamination.

B. Please subpackage the separation liquid reagent aseptically according to the needs of the experiment, and use it after it is restored to room temperature (18℃~25℃). If the indoor temperature is low, the separation solution can be preheated. Centrifugation at 4℃ or lower temperature may cause the white film layer to be unclear.

C. Blood samples should preferably be fresh anticoagulated (within 2h of blood collection). In order to maintain the activity of neutrophils, freezing and cold storage should be avoided.

D. Dilute blood or wash cells, do not use buffer and culture medium containing Ca, Mg ions, its formation will lead to blood cell agglutination, greatly reduce the cell yield and purity.

E. Due to the electrostatic interaction of some plastic products (such as polystyrene), it may cause the cell to hang on the wall, affecting the separation effect.

F. The viscosity or temperature difference of blood samples may affect the separation effect, so the number of centrifugation and centrifugation time can be adjusted to find the best separation condition.

G. If the separated cells are to be further cultured, pay attention to maintain aseptic operation throughout the process to avoid microbial contamination.

Related products

YA0902 Disposable Pasteurized Straw
R1018 Cell Wash Solution
R1017 Whole Blood and Tissue Diluent
S9020 Superior Fetal Bovine Serum
T1300 Trypsin-EDTA Digest (0.25%) Contains no Phenol Red
A Variety of Other Animal and Other Cell Separations and Kits

Note: For more literature on the use of this product, please refer to Solarbio's official website.