PCR*opsis* Blood Cell Separator Nano

Automatable separation of WBC & RBC without centrifugation

Cat. No. BCN025 PATENT PENDING

PRODUCT INFORMATION SHEET

Features:

- Simple means of separating white blood cells (WBC), or unlabeled target cells, from red blood cells (RBC) without centrifugation
- Pipettable cell separation substrate that's ideal for automation and high throughput applications

Description:

The PCR*opsis* Blood Cell Separator Nano offers an alternative to density gradient enrichment of WBC. The substrate used by PCR*opsis* Blood Cell Separator Nano is specifically formulated to precipitate RBC while maintaining WBC in the top layer. This results in unlabeled, untouched WBC for various applications.

Protocol:

1) Thoroughly mix the PCR*opsis* Blood Cell Separator Nano before use
2) Add 1 volume of PCR*opsis* Blood Cell Separator Nano to tubes or deep-well 96-well plate
   a) Thoroughly mix PCR*opsis* Blood Cell Separator Nano before each dispensing
3) Thoroughly mix 0.5 ~ 1 volume of whole blood with PCR*opsis* Blood Cell Separator Nano
4) Let PCR*opsis* Blood Cell Separator Nano / blood mixture sit for >20 minutes at room temperature for separation to occur
5) Remove supernatant above substrate containing an enrichment of WBC
6) Use WBC in desired application

Kit Contents:

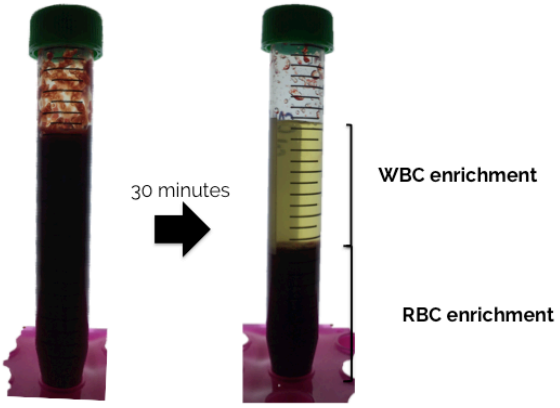
	Qty.	Storage Temp.
PCR*opsis* Blood Cell Separator Nano		Room temp.
Product Info. Sheet	1	-

Note: This product is for research use only and should only be used by trained professionals. Wear protective gloves and eye protection. Follow the safety guidelines and rules enacted by your institution. A commercial license must be purchased from Entopsis LLC if this product is to be used for any commercial purposes within or outside of the United States of America.

PCR*opsis* Blood Cell Separator Nano

Automatable separation of WBC & RBC without centrifugation

Cat. No. BCN025 PATENT PENDING

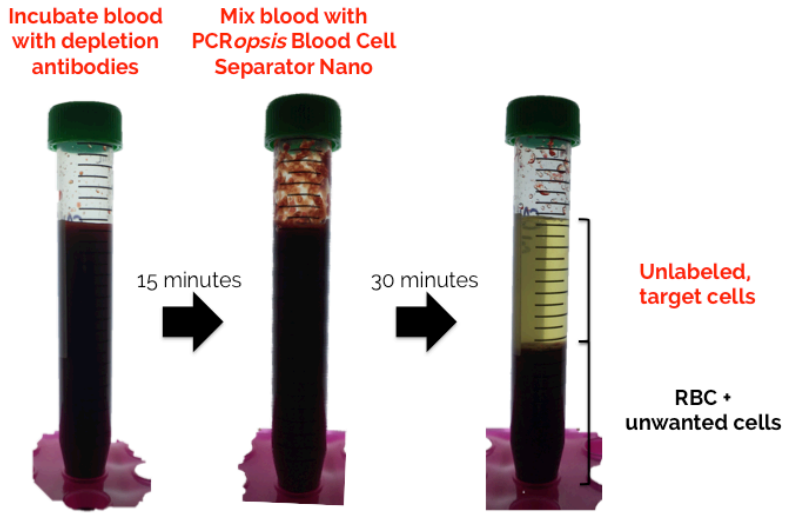


Average recovery when using 5 mL whole blood is mixed with 5 mL PCR*opsis* Blood Cell Separator Nano

- **20 minute: 1.5~2 mL WBC enrichment**
- **25 minutes: 2~3 mL WBC enrichment**
- **30 minutes: 3~4 mL WBC enrichment**
- **35 minutes: 4~5 mL WBC enrichment**

Whole human blood (5 mL) was mixed with 5 mL PCR*opsis* Blood Cell Separator Nano, mixed thoroughly with substrate and incubated at room temperature for 30 minutes. The substrate causes RBC to precipitate while keeping WBC in the top layer. The WBC enrichment layer has residual RBC.

Blood Cell Isolation: Negative Selection



NOTE: Depletion antibodies crosslink RBC & unwanted cell type(s). These antibodies are not sold by Entopsis LLC.

PCR*opsis* Blood Cell Separator Nano can also be used to isolate unlabeled target cells without centrifugation, magnets or expensive beads. Tetrameric antibodies that complex RBC with unwanted cell types (e.g., granulocytes) can be used to precipitate unwanted cells along with RBC. This approach results in an enrichment of target cells in the top layer. These cross-linking antibodies are currently only sold by StemCell Technologies as part of the RosetteSep™ platform.

Note: This product is for research use only and should only be used by trained professionals. Wear protective gloves and eye protection. Follow the safety guidelines and rules enacted by your institution. A commercial license must be purchased from Entopsis LLC if this product is to be used for any commercial purposes within or outside of the United States of America.