



AKADEUM  
LIFE SCIENCES

# Human PBMC Leukopak Isolation Kit

with BACS™ Microbubbles

From leukopak bag to purified PBMCs in one hour with high yield, leukopak human PBMC isolation has never been easier!



## Better Science Relies on Better Cells

Isolate Human Leukopak Peripheral Blood Mononuclear Cells (PBMCs) directly from leukapheresis material without the need for lysis or density gradient centrifugation. The **Human PBMC Leukopak Isolation Kit** was developed with **BACS™ Microbubbles** to isolate truly untouched PBMCs from leukopak material. Non-PBMCs are targeted and removed with antibodies recognizing CD66b, CD123, CD235ab via negative selection. The **Human PBMC Leukopak Isolation Kit** has the capacity to isolate PBMCs from up to  $12.5 \times 10^9$  total cells (red blood cell and white blood cells combined).

Akadeum Life Sciences 674 S Wagner Rd, Ann Arbor, MI 48103  
Akadeum.com 734.707.1233 info@akadeum.com

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## Why BACS™ Microbubbles?



**Say goodbye to Ficoll and lysis** - Chemical-free processing that avoids exposing cells to lysis and density gradient reagents for truly untouched PBMCs.



**Higher recovery**  
Industry leading recovery of PBMCs allows you to get the most out of your leukopak, limiting donor recalls.



**Saves time**  
From leukopak bag to purified cells in under an hour enables greater productivity, adding flexibility to your day.



**No dedicated equipment, magnets, or columns**  
Only general tools and equipment needed are pipet, centrifuge, and end-over-end rotator.



**Scalable to your needs**  
Process more material per isolation and more isolations per shift.



**Painless platelet removal**  
Spare your cells from repeated washes and centrifugations.



**Gentle on fragile cells**  
Exceptionally gentle on delicate PBMC isolation.

## Hassle-Free PBMC Enrichment from Leukopaks

The **Human PBMC Leukopak Isolation Kit** streamlines PBMC isolations by eliminating the need for excess equipment and time-consuming sample preparation (i.e., Ficoll gradients or lysis) – allowing you more time to spend focusing on what matters, your research. By ruling out the need for pre-processing, the **Human PBMC Leukopak Isolation Kit** minimizes handling steps and consistently delivers more isolated PBMCs. Get the most out of your time and material with the **Human PBMC Leukopak Isolation Kit**.

## How the Human PBMC Leukopak Isolation Kit Works:

Leukopak samples contain a milieu of immune cells (i.e., white blood cells), plasma, platelets, and red blood cells. The **Human PBMC Leukopak Isolation Kit** uses a negative selection method to enrich PBMCs by removing unwanted cell populations. (Figure 1)

These unwanted cells are labeled with an optimized cocktail of biotinylated antibodies targeting CD66b, CD123, and CD235ab. **Microbubbles** are mixed into the sample where they bind to the labeled cells and gently float them to the surface. Untouched PBMCs in their original state are subsequently harvested. Isolated PBMCs are suitable for flow cytometry, molecular assays, activation and expansion, cell culture, or other functional studies.

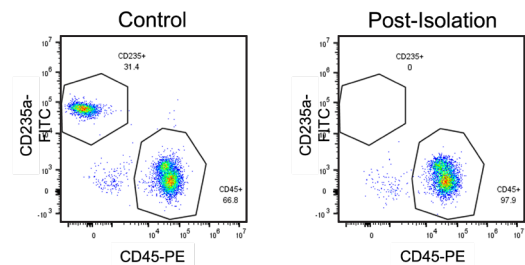


Figure 1: Isolated PBMC were labeled for CD45 and CD235a. The fluorescently labeled cells were analyzed by flow cytometry.

## Ordering Information

Catalog Number	Product Name	Size
13210-223	Isolation Kit	For 12.5 x 10 <sup>9</sup> Total Cells
13210-223T	Isolation Kit, Research Scale	For 2 x 10 <sup>9</sup> Total Cells