

## Protocol for the use of unfilled pluriMate® centrifugation tubes

### pluriMate® - Specification

pluriMate - 2 ml, unfilled

Order No. 50 pcs.

44-00002-10

Order No. 100 pcs.

44-00002-11

pluriMate - 15 ml, unfilled

44-00015-10

pluriMate - 50 ml, unfilled

44-00050-10

44-00050-11

**Product Description** pluriMate® was developed for optimal separation of leukocytes and peripheral blood mononuclear cells (PBMC) from whole blood and bone marrow. The key feature of pluriMate® is the porous sponge incorporated at the bottom of the centrifuge tube. This barrier consists of high-grade polyurethane. It prevents you from time-consuming and laborious overlaying of the sample material. Anticoagulated blood or bone marrow can simply be poured directly from the blood sampling tube into the pluriMate® tube. The porous barrier prevents mixture of the sample material with the separation medium. During the centrifugation the white blood cells (on the basis of their density) are separated depending on the used density gradient medium (Leuko Spin, PBMC Spin, PLT Spin etc.) and will be enriched above the porous barrier and the separation medium. When the separation is complete, the barrier prevents a contamination of the enriched cell fraction during harvest with unwanted cells.

### Directions for the use of the pluriMate® Tube

1. Check that recommended medium, blood sample, density gradient medium and centrifuge are all at room temperature.



### Preparation of the pluriMate® Tube

2. Mix the Spin Medium® thoroughly before use by inverting the bottle several times.
3. Add density gradient medium (e.g PBMC Spin Medium) to the pluriMate® tube.

Fig. a - Fill in sample material

	pluriMate® 2 ml	pluriMate® 15 ml	pluriMate® 50 ml
Density gradient media vol.	0.75 ml	4.5 ml	22 ml

4. Centrifuge at 1000 x g for 10 sec. and discard supernatant.



### Add Sample Material

5. Fill in sample material on top of sponge (Fig. a).

*Note: To reduce platelet contamination you can add pluriSpin® PLT Depletion (Order No. 19-00002-31)*

Fig. b - Before centrifugation

	pluriMate® 2 ml	pluriMate® 15 ml	pluriMate® 50 ml
Sample material vol.	0.25 - 1 ml	2 - 6 ml	5 - 30 ml



Fig. c - After centrifugation

### Spin

6. Centrifuge with break on according to density gradient media specifications below:

PBMC Spin Media	Leuko Spin Media	PLT Spin Media
800 x g 15 min	1000 x g 30 min	800 x g 15 min



Fig. d - Remove plasma

### Collect

7. Remove plasma by pipetting until white cell layer (Fig. d).
8. Collect cells in the white layer into a fresh tube (Fig. e).



Fig. e - Collect cells

### Wash

9. Follow up the washing steps (section Wash) explained in the protocol according to the density media that was used.