UNI-SORB

Catalog No. U-01

Ready-to-Use Nylon Wool Column for the Preparation of Enriched T and B Cell Fractions from Mixed Lymphocyte Populations

Nylon wool columns - exploiting the property of B cells, but not T cells, to adhere to nylon wool - are the technique of choice in many laboratories because of the simplicity of the technique and the short time necessary to recover T-enriched as well as B-enriched populations. This method, for which literature references have been accumulating for nearly 30 years, yields excellent B and T preparations (>90% purity).

NOVAMED's UNI-SORB columns are sterile, ready-to-use polypropylene tubes packed with specially treated nylon wool. The top of the column is closed with a silicon rubber plug which may be penetrated by syringe needle. In fact, best results are obtained when the tube is inverted and the cell preparation injected up through the cap. After incubation in the horizontal position, the column is held upright and outflow is controlled by a unique twist valve.

UNI-SORB columns are manufactured to rigorous specifications ensuring consistent performance and reproducible results.

Suggested Separation Protocol

1. Remove protective sterility cap (Fig. 1) from the twist valve.
2. Hold the column upside down and open the twist valve (Fig 2).
3. Slowly inject up through the rubber stopper enough sterile 5%-FCS in PBS (or other medium) to completely cover the nylon wool.
4. **Leave needle in cap**, invert column and allow medium to drain out.
5. Prepare lymphocytes by density-gradient centrifugation on Ficoll-Paque (NOVAMED's **Uni-Sep** line of tubes is especially designed for this step).
6. Suspend up to 8 x 10^7 cells in about 2 ml of 5% FCS-PBS or other medium.

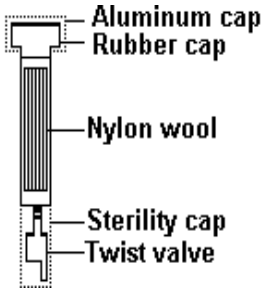

Figure 1.

7. Holding the column upside down, slowly inject the cell suspension into the column.
8. Close the twist valve and incubate the column (lying flat) at 37^{o}C for 60 minutes.
9. Remove aluminum cap and rubber stopper from top of column.
10. Open twist-valve and collect eluent. Wash nylon wool twice with 10 ml of medium each time to completely remove non-adherent **T-cells**. Spin down collected cells and discard supernatant fluid.

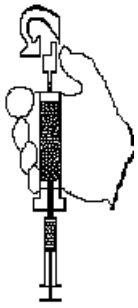

Figure 2.

11. To remove adherent **B-cells** fill the column with medium and then compress nylon wool three times with a plunger. For this purpose we recommend the plunger from a 5 ml disposable plastic syringe (13 mm diameter) (Figure 3).
12. Repeat the previous step two more times and pool the **B-cell** containing fractions.
13. Spin down collected cells and discard supernatant fluid.
14. Resuspend cell pellet in approximately 10 ml of desired medium.

Figure 3.

FOR RESEARCH USE ONLY!

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