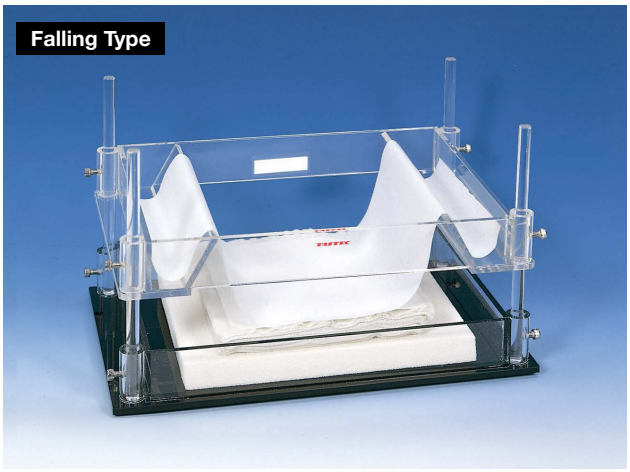
G Capillary Blotter C-set/D-set

The falling pad method increases the transfer efficiency as gravity promotes the transfer of the buffer in addition to water absorption by "Pad" and paper towel.

•Submarine Electrophoresis apparatus --> P.178



Features

- Smooth transfer of even DNA/RNA with a large molecular amount
- Resin water absorption pad can be washed in water and used for many times
- Works even with a small amount of buffer

Applications

- Transfer in Southern blotting
- Transfer in Northern blotting

Model	G Capillary Blotter C-set	G Capillary Blotter D-set
Max. Gel size	150 × 220 mm	120 × 120 mm
Configuration	Pad bath PB-2426 (Base part 350 × 220 mm, Bath inner 290 × 200 × 40H mm)	
	Buffer bath (upper part) BF-2426	
	Pad P-1824 (180 × 240 mm)	Pad P-1515 (150 × 150 mm)

•If the new pads do not absorb enough water, soak them in the buffer for a while before use. Wash the pads with water and allow it to dry naturally after use (The water absorption decreases if it is put in the dryer, etc.)

The effective transfer in just 2 hours. Even DNA/RNA with a large molecular amount.

Conventionally, the membrane was placed on the gel, and the paper towel transferred the band to the membrane with the force of sucking up the buffer. In other words, it had defied gravity. This product was able to obtain the synergy effect and prompt transfer by adding gravity to the capillary force of the paper towel to buffer by placing the membrane under the gel. Smooth transfer of even DNA/RNA with a large molecular amount (See next page for the structure).

Works with a smaller amount of buffer than the conventional one

The efficiency of the falling pad method and the effect of the water absorption pad reduces the buffer amount.

The Resin water absorption pad can be used for many times

The Resin water absorption pad is adopted to reduce the amount of paper towel used. It can be used for many times by washing with water and naturally drying after use.

The effect of the Falling pad method: Southern blot hybridization

Human genomic DNA was cleaved with restriction enzymes and fractionated by Agarose gel Electrophoresis, and then stained with ethidium bromide and confirmed with a UV transilluminator (Fig. 1).

Prepared two gels for comparison experiments. Subsequently performed the transfer using two gels. In order to compare between the falling method for 2 hours and the conventional method for overnight, the gels were stained again with ethidium bromide after the transfer was finished and verified remaining DNA in the gel (Conventional method: Fig. 2a, Falling pad method: Fig. 2b).

In falling pad method, no remaining DNA was observed. Also, hybridization was performed to confirm whether DNA was transferred to the membrane (A, B, C, D in Fig. 3). A: conventional method (10 × SSC buffer) and B to D : Falling pad method (using alkaline and 10/20 × SSC buffer in each). Verified the performance of the falling pad method for 2 hours was equivalent to that of the conventional method for overnight in each buffer.

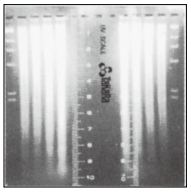


Figure 1

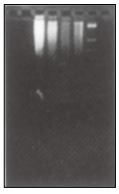


Figure 2a

Figure 2b

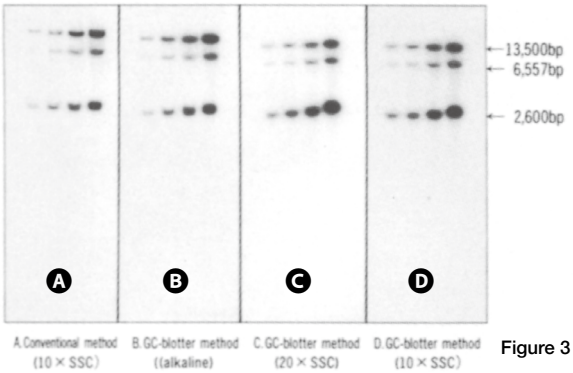


Figure 3