

CENTRI•SEP 96

96 WELL GEL FILTRATION PLATE

Catalog Number CS-965

Box of 50 plates

Description:

CENTRI•SEP 96 plates are prepacked with a hydrated, cross-linked gel suitable for removing excess terminators and nucleotides from Dye Terminator sequencing reaction mixtures. The purified reaction mixtures are suitable for sequencing on an automated DNA sequencer such as the ABI 377, 3100 or 3700. The plates are sealed top and bottom with an adhesive foil seal to prevent drying of the gel beds. Products may be collected into standard 96 well format collection plates (not supplied) for subsequent concentration and denaturing steps.

The procedure consists of removing the interstitial fluid from the **CENTRI•SEP 96** plate by spinning for 2 minutes in a centrifuge equipped to handle deep well plates. The samples are applied to the individual wells and the plate is spun again to collect the purified product in a 96 well plate. See reverse side for additional usage considerations.

Materials Provided:

- **CENTRI•SEP 96** Plates (50)

Materials / Equipment Required:

- Reusable 96 well wash plates
- 96 well collection plates
- Sealing film (optional)
- Centrifuge with rotor and carriers capable of handling stacked plates (5.1 cm height) at 1500 x g
- Multi-channel pipettor and tips

Storage and Stability:

The **CENTRI•SEP 96** plates are stable until the indicated expiration date when stored at 2-8°C.

Protocol:

1. Important! Allow **CENTRI•SEP 96** plate to come to room temperature before use.

Remove the adhesive foil from the bottom and then from the top of the **CENTRI•SEP 96** plate.

2. Stack the **CENTRI•SEP 96** plate on top of a 96 well wash plate and centrifuge at 1500 x g for 2 minutes. Use an external timer and start timing when the rotor has reached the set speed. Discard the liquid by shaking the wash plate dry. The gel matrix in the wells should appear opaque at this point.
3. Transfer the samples (**20µL or less**) to the individual wells in the **CENTRI•SEP 96** plate, taking care to place the samples in the centers of the gel beds.
4. Stack the **CENTRI•SEP 96** plate on top of a 96 well collection system and centrifuge at 1500 x g for 2 minutes.
5. Remove the 96 well collection plate containing the cleaned samples and dry in a speed-vac equipped with the appropriate rotor. Alternatively the plate can be sealed for storage.

NOTE: This product is intended **for research use only**.

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Centrifugation:

Most centrifuges, either bench or floor models, that accept microplate rotors may be used with the **CENTRI•SEP 96** protocol. However, the rotor must accept a plate stack approximately 5.1 cm in height (combined height of **CENTRI•SEP 96** plate and wash plate) as the carrier swings 90° from its horizontal position to the vertical position.

Timing

It is very important to control both the centrifuge speed and the duration of the run. Centrifuges vary by manufacturer in exactly when the internal timers start. Some models begin counting down as soon as the centrifuge run is started so that the ramp up to speed is included in the run time. If the ramp up is slow, the total time at the selected rpm is reduced, thus reducing the total g-force on the plates. We recommend the following procedure:

Use an external timer to monitor the centrifuge run. Start the timer after the rotor has reached the set speed. Set the brake on maximum. Switch off the centrifuge after 2 minutes at 1500 x g.

As a visual check on the effectiveness of centrifugation, the matrix in the wells should appear opaque and slightly pulled away from the wall after the initial spin prior to sample application. If the matrix appears translucent or shiny, the initial centrifugation conditions are incorrect. Re-spin the plates at 1500 x g for 2 minutes.

Cushions:

Cushions supplied with the centrifuge should be used under the wash plates at all times.

g-force

Speed settings required for each centrifuge to reach 1500 x g will vary with the radius of the rotor used. The centrifuge manufacturer usually supplies a table or nomogram relating rpm to g force. Alternatively, the following table may be used. Values for fractional radii (i.e., 9.5cm) may be determined by interpolation.

Radius (cm)	7	8	9	10	11	12	13	14
rpm required to reach 1500xg	4375	4093	3860	3660	3490	3342	3211	3094

Manual Sample Application:

CENTRI•SEP 96 plates are manufactured using precision filling equipment. This method ensures the extremely uniform gel bed heights required for robotic sample application. Since many users will be loading samples with multi-channel pipettors rather than robots, the following practices should be followed:

Samples should be loaded onto the centers of the matrix beds, without touching the pipet tips to the beds.

Allow the sample to "touch-off" onto the gel bed rather than "blowing-out" the pipet tips.

Place the forefinger of your non-pipetting hand alongside the plate row to which the samples are to be applied. Rest the pipet tips on this finger as they are being guided to the center of the gel beds.