

# Quantum Prep™ SEQueaky Kleen 96 well Terminator Removal Kit

## Introduction

The Quantum Prep SEQueaky Kleen 96 well Terminator Removal kit is ready to use for rapid and efficient removal of unincorporated dye terminators from DNA sequencing reactions. The wells are packed with a special grade of Bio-Gel® P-30 polyacrylamide gel. This unique gel produces very efficient, non-interactive size separations. The top and the bottom of the Quantum Prep SEQueaky Kleen 96 well Terminator Removal filter plate are sealed with polyethylene tape and the plate is enclosed in a foil bag to prevent drying and cracking of the gel bed.

The following items are provided:

- 96 well 800 ml filter plates filled with P-30 gel
- 96 well filter plate lids
- 96 well conical bottom collection plates (250 µl)
- Instruction manual

## Technical Information

### ***Gel Matrix and Buffer***

Bio-Gel P-30 polyacrylamide gel suspended in Tris buffer (10 mM Tris-HCl, pH 7.4) with 0.02% sodium azide.

### ***Sample Application Volumes***

The volume of the DNA sequencing reactions should be in the range of 20–50 µl. Volumes less than 20 µl may give slightly increased recovery volumes.

### ***Expected Retention and Recovery***

>95% retention of unincorporated nucleotides for 20 µl reaction volumes.

>85% recovery of applied DNA for 20 µl reaction volumes.

### ***Required Centrifuge Specifications***

Centrifuge with a centrifugal force of 1,000 x (g), with rotor adaptors for filter/collection plates.

### ***Chemical Stability***

pH 2–10, common aqueous buffers, formamide, dilute organic acids, 20% alcohol (v/v), chaotropic agents, detergents.

### ***Storage***

Store at 4 °C. Do not freeze. Shelf life is 1 year at 4 °C.

### Centrifuge Notes

Centrifuges capable of generating a minimum force of 1,000 x (g) are suitable for use with the Quantum Prep SEQueaky Kleen 96 well Terminator Removal kit use. The gravitational force created at a particular rpm is a function of the radius of the centrifuge rotor. Consult the centrifuge instruction manual for conversion information from rpm to g-force. Alternatively, to calculate the speed (rpm) required to reach a gravitational force of 1,000 x (g), use the following equation:

$$\text{RCF (g)} = (1.12 \times 10^{-5}) (\text{rpm})^2 (r)$$

where r is the radius of the rotor in centimeters and rpm is the speed of the rotor in revolutions per minute.

Recommended centrifuges included: Centra MP4 from International Equipment Company, GS-15R centrifuge from Beckman, SORVALL H-1000B/RT-H250, or any centrifuge capable of accommodating deep well 96 well plates.

### Instructions for Use

1. Remove the seals from the top and the bottom of the 800 µl filter plate and cover the top of the plate with lid.
2. Place the 800 µl filter plate with lid on top of the 250 µl collection plate and then gently place the assembly into the microplate carrier of the centrifuge rotor.
3. Centrifuge for 1 minute at 1,000 x (g) to remove residual buffer (timing starts when centrifugation begins). Discard eluant from the collection plate.
4. Apply sample to the center of the wells in the 800 µl filter plate. Make sure that the sample runs into the gel and not along the sides of the wells. The sample volume should be between 20–50 µl.
5. Place the 800 µl filter plate with lid on top of the 250 µl collection plate and then gently place the assembly into the microplate carrier of the centrifuge rotor.
6. Centrifuge for 4 minutes at 1,000 x (g) (timing starts when centrifugation begins). Retain eluted sample(s) in the collection plate.
7. Dry samples for sequencing. Alternatively, seal the collection plate with sealing tape (catalog number 732-6262) and store the sealed samples plate accordingly.

### Ordering Information

Catalog Number	Description
732-6260	Quantum Prep SEQueaky Kleen 96 well Terminator Removal kit, 2 x 96 plates
732-6261	Quantum Prep SEQueaky Kleen 96 well Terminator Removal kit, 10 x 96 plates
732-6262	Quantum Prep Microplate Sealing Tape, 20 seals