KPL Spin-Pure Filters

Catalog No.	Size
5640-0001 (60-00-53)	5 Filters

DESCRIPTION

KPL Spin-Pure filters provide a rapid and convenient method for concentrating, purifying and desalting peptides, proteins, oligonucleotides, DNA and RNA. The filters provide a 10 kDa molecular weight cut off. They are recommended for the removal of unreacted biotin or fluorophores from labeled macromolecules. The membranes contain a specific modification to minimize protein binding.

APPLICATIONS

- Concentrate dilute samples.
- Buffer exchange or salt removal.
- Separate unreacted biotin or fluorophore from labeled protein, DNA, or other macromolecules.
- Separate primers and dNTPs from PCR products.
- Purify nucleic acid probes and remove unincorporated nucleotides.

STORAGE/STABILITY

Store at room temperature. Stable for a minimum of 1 year from date of receipt when stored at room temperature.

USE

Note: KPL Spin-Pure filters can be used in any centrifuge with a fixed-angle rotor that accepts 1.5 mL microcentrifuge tubes.

1. Ensure that the sample reservoir is firmly placed into the filtrate receiver.
2. Pipette 50 - 500 µL of sample into the sample reservoir. Cap the KPL Spin-Pure filter and place into a microcentrifuge. Centrifuge at the appropriate speed for 15 minutes at room temperature. Continue centrifugation until desired volume is reached. The concentrated solution will remain in the top section of the filter.
3. **For protein applications:**
   a. Centrifuge at 12,000 – 14,000 x g.
   b. For removing unreacted biotin or fluorophore from protein labeling reactions, repeat as necessary until a buffer exchange of at least 200-fold is achieved.
4. **For nucleic acid applications:**
   a. For most nucleic acid applications, a speed of 5,000 x g should be used. Effective retention of DNA by an ultrafiltration membrane requires a reduction in g-force. Otherwise, DNA can be forced through many MWCO membranes regardless of size.
   b. If removing primers and dNTP's from amplified product, a speed of 14,000 x g may be used.
   c. For nucleic acid applications, continue centrifugation until filter is dry. A volume of 500 µL can usually be concentrated in 20 minutes.
   d. Recover nucleic acid sample from the filter with DEPC treated water or 1X TE by rinsing the surface with a pipette tip. Highest yields result from two rinses of 20 µL each.
5. Quantitate recovered nucleic acid sample using standard techniques. Biotinylated nucleic acid probes should be quantitated.

Note that the maximum centrifugal g-force for these filters is 14,000 x g. Some centrifuges only list speeds in rpm and these speeds need to be converted to g-force to use the filters at accurate speed. The maximum sample volume is 500 µL.

RELATED PRODUCTS	CAT. NO.
KPL SureLINK™ Chromophoric Biotin Labeling Kit, 5 x 1 mg	5610-0027 (86-00-01)
KPL SureLINK™ Chromophoric Biotin, 10 mg	5620-0030 (86-00-03)
KPL Detector™ Random Primer Biotinylation Kit	5910-0030 (60-01-00)
KPL Detector™ PCR Biotinylation Kit	5910-0031 (60-01-01)

PRODUCT SAFETY AND HANDLING

This product is considered non-hazardous as defined by the Hazard Communication Standard (29 CFR 1910.1200). Avoid contact with skin and eyes. In case of contact or spillage, clean with copious amounts of water. Product may be disposed via sanitary sewer.

The product listed herein is for research use only and is not intended for use in human or clinical diagnosis.