GENAXXON bioscience

CentriPure Columns

Cat #	Product
CP-0219-Z025	CentriPure Dye Terminator Removal Kit **pack of 25 columns**
CP-0219-Z100	CentriPure Dye Terminator Removal Kit **pack of 100 columns**

CentriPure columns are specially designed for purification and desalting of oligonucleotides longer than 20 base pairs and from proteins greater than 25 kDa with minimal dilution.

The gel bed has a volume of 0.5mL. Samples with a volume up to 100µL can be processed. Optimal purification and recovery is obtained with a sample volume of 50µL.

The gel matrix is Zetadex-50SF, a beaded composite material, composed partially of polymerized dextran. Molecules purified by Zetadex-50 are separated according to size. Smaller molecules pass significantly slower through the column than larger molecules. Buffer and pH effects on resolution are minimal.

Applications:

- Purification of DNA sequencing reactions.

- Removal of free and labelled dNTP's from DNA/RNA polymerisation reactions (e.g. RT-PCR, PCR, nick translation).

- Purification/desalting of proteins. Removal of traces of phenol or exchange of buffer salts, as in multiple restriction digestions. These columns are far superior – in ease of use, speed, and non-toxicity – to such common techniques as phenol/chloroform extractions and ethanol precipitations.

Benefits of CentriPure columns:

- Rapid and efficient separations
- Buffer not pre-selected
- Columns stable at room temperature
- Convenient 20 – 100µL sample size

Centrifugation Notes:

Maximum yield and efficiency are obtained with the horizontal or swinging-bucket rotors. However, fixed-angle-rotor microcentrifuges provide acceptable performance and save time.

If you are not sure of the g-force generated by your centrifuge at specific speeds, calculate the correct speed by using the following formula:

$$\mathbf{rpm = \sqrt{RCF / (1.119 \times 10^{-5})\ r(cm)}}$$

Where: rpm = revolutions per minute
RCF = Relative Centrifugal Force
r = radius (cm) measured from centre of spindle to bottom of rotor bucket.

Example: RCF = 1000 and r = 7.5 cm

$$\mathbf{rpm = \sqrt{1000 / (1.119 \times 10^{-5})\ (7.5)} = 3450}$$

Storage and Shipping

Product does not contain a preservative!
Do not freeze!

Shipped at ambient temperature
Store at room temperature
Keep away from excessive heat and sunlight.

Hydrated columns may be stored at +2°C - +8°C for up to one week.

Allow columns to warm up to room temperature before use!

Material provided:

- CentriPure columns ready-to-use
- Wash tubes (2mL)
- Sample Collection tubes (1.5mL)

Additional Materials Recommended

- Microcentrifuge (variable speed)
- Variable pipette
- Pipette tips
- Vortex mixer
- Microtube Rack

Solutions to common handling errors

Problem: Fluorescent dye or salts elute in the purified sample.

Possible reason:

Touching the side of the column with the pipette tip during sample application or applying the sample anywhere except in the direct center of the gel bed will usually lead to poor separation.

Solution: Load the sample directly into the center of the gel bed and do not touch the sample to the walls of the column.

Problem: Protein recovery is low.

Solution: The ionic strength may need to be increased. Substitute 500µL PBS or suitable buffer in step 2.4 in the protocol before processing your sample.