

Technical Tip

T-3

Using CENTRI•SPIN columns with RNA Samples

Introduction

CENTRI•SPIN spin columns provide a convenient and rapid method to remove excess label from nick translation or PCR labeling reactions (see Application Note A-1). For example, **CENTRI•SPIN-20** will remove up to 99% of free label from a nick translation reaction in a simple 2 minute centrifugation.

CENTRI•SPIN columns are not routinely tested for the presence of RNase and the majority of applications have been developed for proteins and DNA. However, the spin columns may also be used for RNA labeling reactions if precautions are taken to reduce the possibility of RNase contamination. Some of these precautions are discussed below.

Materials and Manufacture

CENTRI•SPIN kit components are supplied either as being RNase/DNase free or are packaged in a clean-room environment. In addition, the separation matrix is tested for nickase activity prior to assembly.

All of the components of a **CENTRI•SPIN** kit may be autoclaved with the exception of the column cap.

Suggested Procedure

Observe Normal Precautions for RNA work

- Use sterile plasticware
- Bake glassware at 200°C for 2 hours
- Use RNase-free salts and buffers for preparing solutions
- Treat non-autoclavable components, such as the **CENTRI•SPIN** column caps with a proprietary anti-RNase treatment such as RNase-ZAP®*.
- Add DEPC to solutions

Column Hydration

Follow the standard hydration protocol using DEPC treated water or buffer (100mL DEPC/liter) as the hydration medium. After the initial vortex mixing, replace the column cap(s) with foil and autoclave the column(s) at 121°C for 20 minutes. Continue with the standard protocol.

These procedures allow the use of **CENTRI•SPIN** columns to remove excess label from RNA reactions with little chance of RNA degradation due to RNase activity. However, these procedures are precautions only and cannot guarantee inactivation of any RNase that might be present.

*RNase-ZAP is a registered trademark of Ambion