

General Procedure:

1. Add an equal volume of 100 mg/mL NaCl solution to the vial containing the deprotected oligonucleotide solution and mix by shaking.
2. Fit a 150 mg TOP-DNA cartridge into a needle tip previously fitted to a Varian Vac Elut 20 Extraction Manifold. Turn the vacuum on and adjust the pressure 7.0 inHg using the vacuum control valve. The vacuum should not need to be adjusted during the purification.
3. Add 0.5 mL acetonitrile to the cartridge to wet the medium.
4. As soon as possible, add 1 mL 2M TEAA **OR** water to the cartridge to condition the medium.*
*TEAA acts as an ion-pairing agent and can improve oligo binding in some cases, but is not necessary

(Short delays between the additions of the following solutions to the cartridge will not effect the purification.)

5. Add 1 mL aliquots oligonucleotide solution to the cartridge, using either a micropipette or a plastic pipette, if the sample vial is graduated.
6. Add 1 mL 100 mg/mL NaCl solution to the cartridge. Repeat with a further 1 mL 100 mg/mL NaCl solution
7. Add 1 mL 5.0% TFA solution to the cartridge. Repeat with a further 1 mL 5.0% TFA solution.
8. Add 1 mL water to the cartridge. Repeat with a further 1 mL water.
9. Remove the cover, using the vacuum release valve. Place a glass test tube in the correct position in the rack and replace the cover. Add 1 mL 50:50 acetonitrile/water to the cartridge.
10. Turn off the vacuum and allow the pressure to equalise. Remove the cover and transfer the oligoribonucleotide solution to a suitable glass vial for storage with a pipette.

The purification should take approximately 10-15 minutes if carried out without any breaks between the additions of the solutions to the cartridge.