

Protocol for packing cartridges / columns with purification resin

Required components

1. Empty tube
2. Sealing sleeve
3. Bottom stop plug
4. Top and bottom frit
5. Top stop plug
6. Sealing plug
7. Syringe
8. Cartridge holder



<https://bit.ly/3bGMnT1>
Recommended: Our video
guide for this protocol.

Column Preparation:

1. Push the smaller frit into the empty tube.
2. Shake the resin bottle to mix beads with storage buffer. This has to be done because otherwise the beads settle on the bottle bottom.
3. Fill a syringe with resin storage buffer and **ensure that no air is left in the syringe.**

Note - All steps up to step 9 from now on: It is essential to avoid any air bubbles in the purification cartridge / tube from now on.

4. Attach the empty tube to the syringe
5. Fill approx. one quarter of the empty tube with agarose storage buffer. **Again, ensure that no air bubbles are in the buffer.**
6. Add 500 μ l mixed purification resin to the column. Make sure that the resin slurry is still properly mixed and the beads did not settle.
7. Remove most of the storage buffer through the use of the syringe. But do not leave the resin beads dry! Otherwise air bubbles might form in between the small agarose beads.
8. Add another 500 μ l of purification resin. Again ensure that it is still properly mixed.
9. Top up the tube with resin storage buffer. Up until it starts to flow over. No possible space for air bubbles should remain.

Column Assembly

10. Add top frit. It is normal that some of the just added storage buffer spills over here. But that is actually a good sign because it means no air was left in the tube.
11. Add sealing plug and place tube in the cartridge holder.
12. Apply pressure on the cartridge to heal the resin airtight between the two frits. Again it can occur that some form of liquid spills over when the pressure is added.
13. Screw on the bottom stop plug and add the sealing sleeve.
14. Complete column by adding the top stop plug.