SPRI Bead Purification Protocol

SPRI beads are Agencourt AMPure XP beads (Cat. No. A63881).

1. SPRI beads are stored at 4 C. Remove from refridgerator and warm to room temperature.
2. Transfer the reaction to a 1.7 mL tube, because that is what fits on the magnet.
3. Calculate volume of beads needed: 1.8 x rxn volume. I.e. for 50 uL rxn, use 90 uL beads.
4. Measure that volume in a pipette tip with water so you know the correct level.
5. Mix beads thoroughly by vortexing. Then pipette the needed volume into the reaction.
6. Mix the beads and the reaction by flicking and gently vortexing. Then quickly spin any solution down to the bottom of the tube (only 1 or 2 seconds -- avoid pelleting the beads).
7. Let stand at room temperature for 5 minutes.
   During this time make 1.1 mL * # rxns of 80% EtOH.
8. Place the tubes on the magnet for 3 minutes.
9. Remove the supernatant, and replace with 500 uL of 80% EtOH. Wash for 1 min.
10. Remove first wash and replace with a second wash of 80% EtOH. Wash again for 1 min.
11. Remove second wash. Spin down the beads and any remaining EtOH, then place the tube back on the magnet and remove any remaining EtOH with a p20.
12. All the beads to dry for 2 minutes with the tubes left open.
13. After drying, add the desired volume of Qiagen Buffer EB or nuclease free water (generally 15 uL). Flick the tube to mix well.
14. Let the DNA elute off the beads for 4 minutes at room temperature.
15. Place the tube back on the magnet for 2 minutes, then remove the supernatant (which contains the DNA) to a new tube.
    If removing the supernatant carries some of the beads over, then pipette smaller volumes separated by a minute or two that allows the magnet to pull the beads back up.