**AMPure XP bead clean-up with PEG 8000**

Note1: The magnetic beads are stored at 4°C and need to be at room temperature before the clean-up.

A. Add 2x the sample volume of the magnetic beads to the sample (e.g. for 20 μL of PCR product add 40 μL of PCR of bead solution).

B. Next, add 2x the sample (i.e. original volume excluding the amount of beads) of the PEG 8000 / 2.5M NaCl to the sample with the magnetic beads.

C. Mix well by pipetting up and down.

Note 2: PEG is viscous so you may also vortex the tubes to ensure proper mixing and spin them down. Though it is ideal that no bubbles form, they are inevitable; so just try to reduce their number.

D. Incubate at room temperature for 10-15 mins.

Note 3: You can even put these samples on the thermomixer to incubate at 750 rpm. Just spin them down post incubation.

E. Place the sample on the magnetic rack for 10 mins or until all the beads are bound to one side of the tube and aspirate the solution by pipetting or vacuum suction.

F. Remove the tubes from the magnetic rack and wash the beads with 200 μL of 80% EtOH. Use a reagent reservoir so you can use a multichannel pipette. Make sure to mix well the samples (vortex if needed).

Note 4: Make new 80% EtOH every time you perform the bead clean-up

G. Place the tubes back on the magnetic rack and incubate the samples for 10 mins or until all the beads are bound to one side of the tube and aspirate the solution by pipetting or vacuum suction.

H. Repeat steps F to G (except vortex mixing), so that samples are washed twice..

I. Remove the samples from the magnetic rack and air-dry the beads (max 2 min).

Note 5: Be sure the beads are not bone-dry. If they are, you will have a difficult time resuspending them in water.

J. Resuspend the beads in 22 μL of PCR grade water and place back on the magnetic rack for 10 mins or until all the beads are bound to one side of the tube.

K. Elute 20 μL of each sample into new tubes (you might use 8-strip PCR tubes).