

*BIO-RAD*  
Quantum Prep<sup>®</sup>  
Plasmid Miniprep Kit

Before First Use of Quantum Prep Kit:

- Heat Cell Lysis Solution and Neutralization Solution to 37° C to dissolve any salt precipitates.
  - Add 63 ml of 95% ethanol to the Wash Solution (only the first time it is opened)
1. Transfer an overnight culture (1-2 ml) of plasmid-containing cells into a microcentrifuge tube. Pellet the cells by centrifugation for 30 seconds. Remove all of the supernatant by aspirating or pipetting.
  2. Add 200 µl of the Cell Resuspension solution and pipet up and down (or vortex) until the cell pellet is completely resuspended.
  3. Add 250 µl of the Cell Lysis Solution and mix by gently inverting the capped tube (DO NOT VORTEX). The solution should become viscous and slightly clear if cell lysis has occurred. Continue to mix if it is still cloudy.
  4. Add 250 µl of the Neutralization Solution and mix by gently inverting the capped tube 10 times (DO NOT VORTEX). A visible precipitate should form.
  5. Pellet the cell debris for five minutes in a micro-centrifuge at maximum speed (12 - 14,000 x g). A compact white pellet will form along the side or at the bottom of the tube
  6. While waiting for the centrifugation step above, insert a Spin Filter into a new microcentrifugation tube. Thoroughly mix the Quantum Prep matrix before removing an aliquot. Directly pipete 200 ul of matrix into spin filter. Immediately pour the supernatant from step 5 into the Spin Filter. Mix by pipetting up and down. Spin for 30 seconds.
  7. Remove the Spin Filter from its microcentrifugation tube, discard the filtrate at the bottom of the tube and replace the filter into the same tube. Add 500 µl of wash solution and wash the matrix by centrifugation for 30 seconds.
  8. Repeat step 7 washing the filter for 2 minutes to remove all residual traces of ethanol.
  9. Remove Spin Filter and discard microcentrifugation tube. Place filter in a new microcentrifugation tube and add 100 µl of deionized H<sub>2</sub>O or TE. Elute the DNA by centrifugation for 30 seconds. Keep the sample in your tube. It has the DNA in it.
  10. Discard the spin filter and store the eluted DNA at -20° C