

QIAquick Gel Extraction Kit Protocol

For more details, trouble-shooting, etc. please see Qiagen manual

1. Excise DNA fragment from agarose gel with a clean, sharp scalpel. A 1% regular agarose in 1X TBE is fine.
2. Weigh the gel slice in a colorless tube. Add 3 volumes of **Buffer QX1** to 1 volume gel (100 mg ~ 100 µl). The maximum amount of gel slice per QIAquick column is 400 mg; for gel slices >400 mg, use more than one column.
3. Incubate at 50°C for 10 min (or until the gel slice has completely dissolved). To help dissolve gel, mix by vortexing the tube every 2-3 min during the incubation.
4. After the gel slice has dissolved completely, check that the color of the mixture is yellow.
5. Add 1 gel volume of isopropanol to the sample and mix.
6. Place a QIAquick spin column in a provided 2-ml collection tube.
7. To bind DNA, apply the sample to the QIAquick column, and centrifuge for 1 min.
8. Discard flow-through and place the QIAquick column back in the same collection tube.
9. (Optional): Add 0.5 ml of **Buffer QX1** to QIAquick column and centrifuge for 1 min.
10. To wash, add 0.75 ml of **Buffer PE** to QIAquick column and centrifuge for 1 min.
11. Discard flow-through and centrifuge the QIAquick column for an additional 1 min at ~13,000 rpm.
12. Place QIAquick column into a clean 1.5-ml microfuge tube.
13. To elute DNA, add 50 µl of 10 mM Tris-HCl, pH 8.5 of H₂O to the center of the QIAquick column and centrifuge for 1 min at maximum speed. Alternatively, for increased DNA concentration, add 30 µl elution buffer to the center of the QIAquick column, let stand for 1 min, and then centrifuge for 1 min.