

**SOP Name:** DNA Gel extraction (Qiagen QIAquick GEL extraction kit)

**Author:** Marcia Pryce

**Source(s):** Adapted from Exeter 2015

**Time Required:** 30minutes

**Materials:**

- Gel containing DNA to extract
- Gel extraction tips
- Buffer QG (3 volumes gel extract (100 mg = 100µl) + 500µl)
- Isopropanol (1 gel volume)
- QIAquick spin column
- Buffer PE (750 µl)

**Procedure:**

1. Use gel extraction tips to extract the DNA band from the gel. Fit the tip around the band, push in, wiggle, and take out. Complete this step under UV light to ensure the correct band is extracted.
2. Use a pipette to eject the gel into a 1.5 ml eppendorf tube. Weigh the gel in the tube.
3. Resuspend the gel in 3 gel volumes of QG buffer and incubate at 50C for 10 min. Vortex periodically during this time.
4. Add 1 gel volume of isopropanol and mix.
5. Transfer the solution to a QIAquick spin column and centrifuge for 1 min.
6. Discard the flow through and replace the column. If the sample volume is >800µl then instead replace the flow through and spin again before discarding.
7. Add 750 µl buffer PE to the column and centrifuge for 1 min. Discard the flow through and replace the column.
8. Centrifuge again dry for 1 min.
9. Place the column into a clean 1.5 ml eppendorf tube and use this in the elution stage of DNA miniprep.