Gel Extraction (QIAquick Gel Extraction Kit)

Materials

Buffer QG
Buffer PE
Buffer PB
3M Sodium acetate
Isopropanol
0.8% agarose gel

Steps

1. Excise the DNA fragment from agarose gel with a clean scalpel and place it in an eppendorf tube.
2. Weigh the gel slice and add 3 volumes buffer QG to 1 volume gel with the maximum gel weight being 400 mg. If >2% agarose gels, add 6 volumes Buffer QG.
3. Incubate at 50 ℃ with vortexing every 2-3 mins till the gel completely dissolves.
4. If the colour of the mixture turns orange or violet, add 10 µl of 3M sodium acetate, pH 5 and mix till the mixture turns yellow.
5. Add 1 gel volume of isopropanol and mix by inverting.
6. Transfer 800 µl of the mixture to a MinElute column and centrifuge at 13,000 rpm for 1 min to bind DNA. If the mixture is more than 800 µl, load and spin again. Discard flow-through.
7. Wash the column 4 times by adding 750 µl, 500 µl, 250 µl and 250 µl of buffer PE respectively and centrifugation at 13,000 rpm for 1 min.
8. Discard the flow-through and centrifuge the MinElute column at 13,000 rpm for 1 min.
9. Place the MinElute column into a 1.5 ml microcentrifuge tube.
10. To elute, add 10-20 µl of buffer EB to the center of the column, let stand for 5 mins at room temperature and centrifuge at 13,000 rpm for 1 min.
11. Test the sample using Nanodrop and verify by running 1-3 µl of sample on a 0.8% agarose gel.

Adapted from Qiagen