

Chelex Extraction

Description

This is a nice and easy method to extract DNA, it is particularly useful for small organisms because it gives a big yield and it is possible to remove the body for slidemounting/further morphological work after extracting the DNA. It is a "dirty" extraction because the proteins and other contaminants are not removed from the extract, it's only really good for PCR applications as a result. According to wikipedia the exact role of Chelex in DNA extraction is [uncertain](#) but it works well nonetheless!

What you need

[Chelex](#) resin available from [BioRad](#)

Protocol

1. Prepare a truncated p1000 tip (cut the end off with scissors so the chelex balls will go in)
2. Switch on heating block and set to 98°C, put Chelex on stirrer and switch on
3. Add 200µl to 500µl of Chelex solution and sample to eppie tube
4. Vortex tubes
5. Spin down on high speed for 1 minute to make sure sample is below the surface of the Chelex solution
6. Heat the tubes @ 98°C for 10 to 20 mins
7. Spin them down briefly and cool on ice (or in the freezer) for 5 mins
8. Centrifuge at high speed for 10 mins
9. DNA is now ready to use, spin before each use and make sure to never get any chelex beads into a PCR or it will kill it :-)

Recipes

100 mL of 20% chelex in TE (10mM Tris HCl & 1mM EDTA pH8.0)

Clean H ₂ O	50ml
1M TRIS-Hcl pH8	1ml
0.5M EDTA	200µl
Chelex resin	20g
make up to 100ml with clean H ₂ O	

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