






Genomic DNA Purification Kit

The prep uses:

- 200 µl of whole blood
- 25-30 mg of mammalian tissue or mouse tail
- 50-100 mg of plant tissue
- 0.4-0.6x10⁶ of cultured cells
- 10-20 mg of bacterial mass

Purification Protocol

Dilute Precipitation Solution just prior to use: mix 720 µl of water, nuclease-free, with 80 µl of the provided Precipitation Solution concentrate

-  Mix 200 µl of sample with 400 µl **Lysis Solution**
Incubate 5 min at 65°C
-  Add 600 µl of chloroform, invert 3-5 times
Centrifuge for 2 min
-  Transfer the upper aqueous phase containing DNA to a fresh tube
Add 800 µl of diluted **Precipitation Solution** and mix for 1-2 min
Centrifuge for 2 min
Discard supernatant completely
-  Dissolve DNA pellet in 100 µl of **NaCl Solution** (*Make sure that pellet is completely dissolved*)
Add 300 µl of cold ethanol, let the DNA precipitate (10 min at -20°C)
Centrifuge for 4 min and discard supernatant
Wash the pellet once with 70% cold ethanol
-  Dissolve DNA in 100 µl of water or TE

Note. All centrifugations should be carried out in a microcentrifuge at $\geq 12000 \times g$ (~11000 rpm)

Commonly Used Buffers

50X TAE (Tris-acetate-EDTA) Electrophoresis Buffer Available from Fermentas, #B49

	per liter:	Final 1X concentration:
Tris base	242 g	40 mM
Glacial acetic acid	57.1 ml	20 mM
0.5 M EDTA (pH 8.0)	100 ml	1 mM
H ₂ O	to 1 liter	

10X TBE (Tris-borate-EDTA) Electrophoresis Buffer Available from Fermentas, #B52

	per liter:	Final 1X concentration:
Tris base	108 g	89 mM
Boric acid	55 g	89 mM
0.5 M EDTA (pH 8.0)	40 ml	2 mM
H ₂ O	to 1 liter	

TE (Tris-EDTA) Buffer, pH 7.4, 7.6 or 8.0

	per liter:	Final 1X concentration:
1 M Tris, pH 7.4, 7.6, 8.0	10 ml	10 mM
0.5 M EDTA (pH 8.0)	2 ml	1 mM
H ₂ O	to 1 liter	

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