REME-D

MG-NA

FOR UNIVERSAL NUCLEIC ACID EXTRACTION

MG-NA is a RNA/DNA extraction kit for isolation and purification of nucleic acids from tissues, whole blood, serum, plasma and nasopharyngeal swabs.

Kit Components	**Volumes for 50 reaction**	**Storage conditions**
Lysis Buffer (LB) (shake before use)	23 ml	Room Temperature
B-Mercaptoethanol (BME)	1 ml	Room Temperature
Binding Buffer (BB)	30 ml	Room Temperature
Magnetic Nano-beads (MNBs)	4 ml	Room Temperature
Washing Buffer I (WB1)	38 ml	Room Temperature
Washing Buffer II (WB2)	75 ml	Room Temperature
Elution Buffer	12 ml	Room Temperature

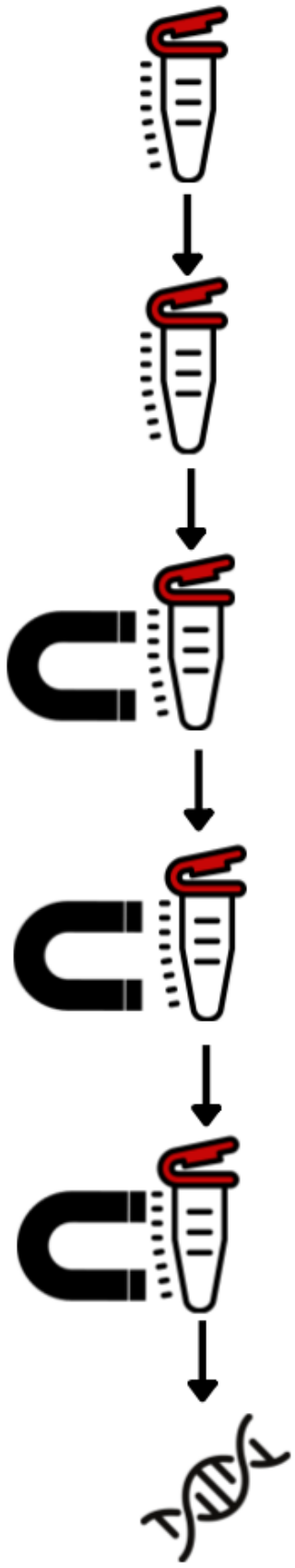
Extraction Protocol

(NB: For nucleic acid extraction from tissues, 200 mg tissue is homogenised in 1000 µl lysis buffer, incubate at room temperature for 5 min, moving directly to step 3)

1. Add 10 µl BME to each 1 ml of lysis buffer (shake before use) directly before use.
2. Add 200 µl of sample to 300 µl lysis buffer in a 2 ml tube→ Tube 1. Mix by pipetting 3–5 times up and down. Incubate at room temperature for 5 minutes.
3. Shake and mix the magnetic beads well before use. Add 50 µl of MNBs to Tube 1 the and mix well by pipetting up and down gently.
4. Add 400 µl of binding buffer to Tube 1, then mix gently.
5. Incubate Tube 1 for 3 minutes at 65°C.
6. Insert Tube 1 into the magnetic rack and allow it to stand for 3 minutes at room temperature. Discard the clear solution, using a pipette.
7. Add 500 µl washing buffer 1 to Tube 1 and repeat step 6.
8. Add 500 µl washing buffer 2 to Tube 1 and repeat step 6. Repeat wash 2 step.
9. Remove Tube 1 from magnetic rack and resuspend MNBs in 50 µl elution buffer (**Elute in 150 µL in case of Genomic DNA tests)** and incubate it for 3 minutes at 65°C.
10. Apply magnetic separation and collect the RNA/DNA using a pipette while hot.

Equipment needed

1- Magnetic Rack
2- Thermal Block



LB+ BME+Sample

Mixing + Incubation for 5 min at RT

MNB + BB

Mixing + Incubation for 3 min at 65 °C

Incubation for 3 min on the magnetic rack + Magnetic Separation

WB1 + Magnetic Separation

WB2 + Magnetic Separation

X2

Elution Buffer + Incubation for 3 min at 65 °C + Magnetic Separation

Extracted DNA/RNA