



**Severn
Biotech Ltd.**

Adapted Protocol for Solid Animal Tissue

1. **Homogenise and Lyse:** Place 10–20 mg of minced animal tissue directly into **900 µL L6 (20-8600)**. Homogenise using a micro-pestle or vortex vigorously with a few clean lysis beads until no large tissue chunks remain. *(Optional: Incubate at 56°C with Proteinase K if dealing with tough fibrous tissue).*
2. Spin the lysate for **1 minute at high speed** to pellet any undigested tissue debris or connective fibre. **Transfer the cleared liquid supernatant** into a clean 1.5 mL tube.
3. Add **40 µL Extraction Matrix (20-8000)** to the cleared supernatant.
4. Vortex for **5 seconds**, then allow it to stand at room temperature for **10 minutes** to let the DNA/RNA bind to the silica.
5. Vortex for **5 seconds**, spin for **15 seconds** in a microfuge, and carefully remove/discard the supernatant.
6. Add **1 mL L2 (20-8200)**, vortex thoroughly, spin for **15 seconds**, and remove the supernatant.
7. Repeat step 6 (a second wash with L2 Buffer helps eliminate residual animal proteins).
8. Wash with **70% ethanol (40-1706) twice**, spinning 15 seconds and discarding the supernatant each time.
9. Wash with **acetone (40-1900) once**, spin for 15 seconds, and remove the supernatant.
10. **Dry the pellet for 10 minutes at 56°C** with the tube lid open to ensure all acetone and ethanol traces evaporate.
11. Add **50 µL RNase-free H₂O** (or [TE Elution Buffer](#)), close the lid, and vortex vigorously to resuspend the matrix.
12. **Incubate at 56°C for 10 minutes** to release the nucleic acids from the matrix.
13. **Vortex and spin for 2 minutes** at high speed.
14. Carefully collect the supernatant containing your purified total DNA/RNA. Passing the eluant through a **spin filter tube (20-8800)** is highly recommended here to prevent any accidental carryover of the extraction matrix into your final solution.