Protocol for the preparation of Nucleic Acid Preservation (NAP) Buffer

Materials and equipment:

- EDTA disodium salt dehydrate
- Sodium citrate trisodium salt dihydrate
- Weigh boat or paper
- Ammonium sulfate
- Ultra-purified molecular grade water
- Scale
- Magnetic stirrer with heating plate
- Stirring rod
- H2SO4 to adjust the pH
- pH reader
- Bottle or flask

To make NAP buffer:

1. Combine 7.44 g of EDTA, 7.35 g of sodium citrate trisodium salt dihydrate, and 700 g of ammonium sulfate in 1 L of water in bottle or flask. Stir on low to moderate heat until the ammonium sulfate dissolves completely, which usually takes hours.
2. Cool to room temperature, then adjust pH to 5.2 with H2SO4.
3. Store at room temperature or keep refrigerated until aliquoted.
4. Aliquot 1.5 mL of buffer into 2 mL tubes for preservation of up to 150 mg of sliced tissue.

Citation:
Camacho-Sanchez, M., P. Burraco, I. Gomez-Mestre, and J. A. Leonard. 2013. Preservation of RNA and DNA from mammal samples under field conditions. Molecular Ecology Resources 13:663–673.