DNApure Reagent (Genomic DNA Isolation Reagent)

For research use only

DNApure Reagent 20ml	Cat no: YT9091
DNApure Reagent 50ml	Cat no: YT9092
DNApure Reagent 100ml	Cat no: YT9093

DNApure Reagent is a complete and ready-to-use reagent for the isolation of genomic DNA from tissue and liquid samples. The DNApure Reagent is a novel guanidine-detergent lysing solution which permits selective precipitation of DNA from a cell lysate. The procedure can be completed in 30-40 minutes with a genomic DNA recovery of 70 - 100%. The isolated DNA can be used, without additional purification, for Southern analysis, dot blot hybridization, molecular cloning, PCR and other molecular biology and biotechnology applications.

Reagents required, but not supplied: 100% ethanol – 75% ethanol – Nuclease free water

Cell Lysis :

1- Cells grown in monolayer: Add 0.75-1.0 ml of DNApure Reagent per 10 cm2 culture plate area.
2- Add 1 ml of DNApure Reagent to 1-3 × 10^7 cells, either in pellet or in suspension (volume < 0.1 ml)
3- Homogenize 10-40 mg tissue in 1 ml of DNApure Reagent

PROTOCOL

1- **LYSIS \ HOMOGENIZATION:** add 1 ml DNApure reagent to 10-40 mg tissue, 10^7 cells or 0.1 ml liquid sample.
2- **INCUBATION:**
   I. Incubate for 10 minutes at room temperature
   II. Incubate on ice for 10 minutes

3- **CENTRIFUGATION:** Sediment the homogenate for 3 min at 10,000 × g at room temperature. transfer the resulting viscous supernatant to a fresh tube.

4- **DNA Precipitation:** add 1ml of cold 100% ethanol of the same volume(add 1ml ethanol per 1 ml of DNApure Reagent used for the isolation). Invert several times to mix well, DNA should quickly become visible as a cloudy precipitate.

5- **CENTRIFUGATION**: centrifuge at 15000 × g for 2-3 min at room temperature to pellet the DNA and discard the supernatant.

6- **DNA WASH:**

I. Wash the DNA precipitate in 1ml ethanol 70% .Centrifuge at 15,000g for 1-2 minute and Discard the supernatant
II. Wash the DNA precipitate in 0.5ml ethanol 70%. Centrifuge at 15,000g for 1-2 minute and Discard the supernatant

7- **DNA SOLUBILIZATION:** Air dry the DNA by storing in an open tube for 1-15 minutes after removing the ethanol. (If the DNA pellet overdried, it will be much more difficult to dissolve.) dissolve the pellet in 50-100µl nuclease free water or 10mM Tris-HCL .