

Tissue Grinding Tool

Combination of microtube, beads and pestle for homogenization of small samples of tissue, bacteria, yeast or cell cultures.

Cat. no.	pcs.
E0359-01	10 preps
E0359-02	50 preps
E0359-03	10 preps
E0359-04	50 preps

Tissue Grinding Tool (TGT) is a convenient tool for disrupting small portions of plant and animal tissues, bacterial, yeast or cell cultures pellets in quantities corresponding to one extraction experiment. The set consists of a 1.5 ml Eppendorf tube containing a small amount of grinding beads and a pestle with a specially adapted shape. The sample can be homogenized in a small amount of lysis buffer or without any additives. In most cases, a better homogenization effect can be obtained by grinding the material in a small volume of lysis solution (50-150 µl). **TGT** can also be used to disperse centrifugal pellets, precipitates, and other soft solids.

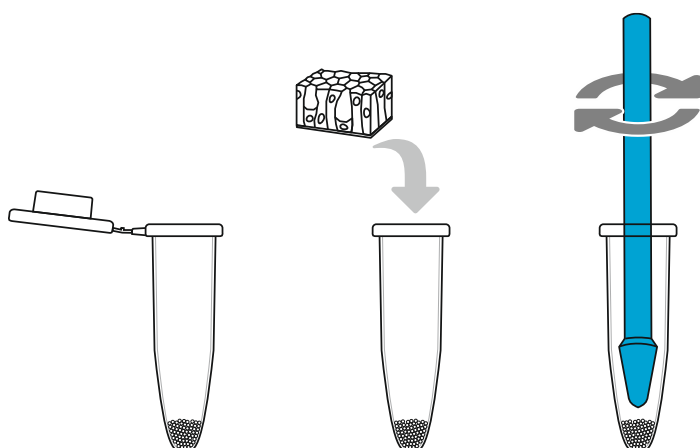
The set is available in two variants differing in type of grinding beads:

E0359-01/02 - Zirconia/Silica beads (50% more dense than glass), regular, diameter 0.5 mm. Recommended for spores and most tissues.

E0359-03/04 - Garnet sharp particles, diameter 0.3 mm. Recommended for plant and tough tissue, environmental samples, bacterial and yeast pellets.

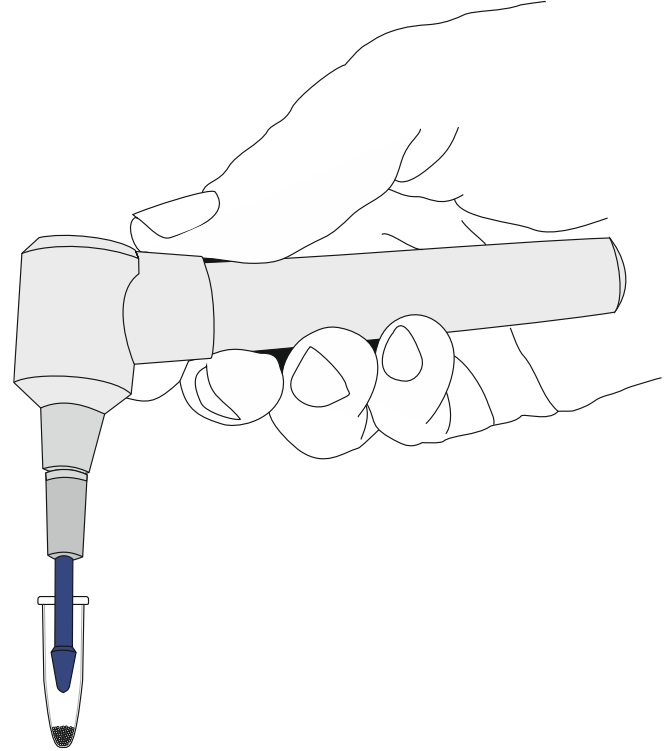
Protocol:

- (1) Add 50-150 µl of the appropriate lysis buffer (depending on the chosen protocol) to the tube with selected grinding beads. Then add an appropriate portion of plant, animal or other sample. Crush the sample by rotating the pestle with your fingers. The grinding time depends on the type of sample and varies from 30 sec to a maximum of 2 min.
- (2) Remove the pestle, fill the volume of lysis buffer accordingly to the protocol used. Vortex for a few seconds or mix thoroughly by inverting the tube.
- (3) Continue the desired protocol.

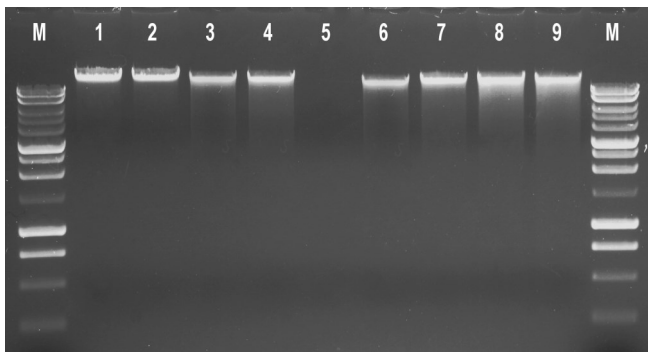


Tissue Grinding Tool can be used at the sample homogenization stage with the following EURx GeneMatrix DNA/RNA purification kits: **Universal RNA** (E3598), **Universal RNA/miRNA** (E3599), **RNA/DNA Extracol** (E3750), **Universal DNA/RNA/Protein** (E3597), **Tissue DNA** (E3550), **Tissue&Bacterial DNA** (E3551), **Bacterial&Yeast Genomic DNA** (E3580), **Plant&Fungi DNA** (E3595), **Food-Extract DNA** (E3525) and with universal reagent for genomic DNA isolation **GeDI** (E3760, E3765).

Storage. **Tissue Grinding Tool** should be stored at room temperature.

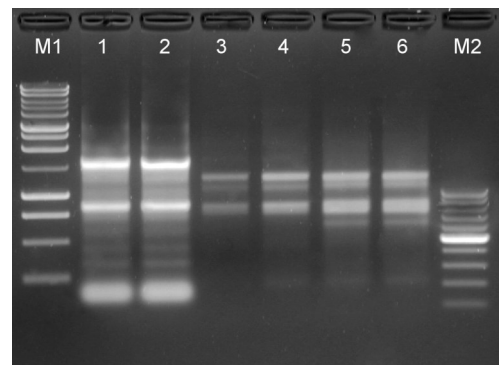


In order to increase the efficiency of fragmentation and in case of extracting DNA/RNA from many samples at the same time, we recommend a rotatable, battery-operated, mechanical mini-homogenizer (E0357). The mini-homogenizer is a low-cost, hand-held mixing motor drive. With its greatly increased rotational speed lysis of soft tissue samples is complete in seconds.



DNA isolated after homogenization using Tissue Grinding Tool:

1. E0359-01/02, rat brain, DNA/RNA Extracol Kit.
 2. E0359-03/04, rat brain, DNA/RNA Extracol. Kit
 3. E0359-01/02, spruce needles, Universal DNA/RNA/Protein Kit.
 4. E0359-03/04, spruce needles, Universal DNA/RNA/Protein Kit.
 5. *Streptomyces caespitosus*, without homogenization, GeDI Kit.
 6. E0359-01/02, *Streptomyces caespitosus*, GeDI Kit.
 7. E0359-03/04, *Streptomyces caespitosus*, GeDI Kit.
 8. E0359-01/02, pig liver, Tissue DNA Kit.
 9. E0359-03/04, pig liver, Tissue DNA Kit.
- M - Perfect Plus™ 1 kb DNA ladder (EURx).



RNA isolated after homogenization using Tissue Grinding Tool:

1. E0359-01/02, rat brain, DNA/RNA Extracol Kit.
 2. E0359-03/04, rat brain, DNA/RNA Extracol Kit.
 3. E0359-01/02, spruce needles, Universal DNA/RNA/Protein Kit.
 4. E0359-03/04, spruce needles, Universal DNA/RNA/Protein Kit.
 5. E0359-01/02, barley leaf, Universal RNA Kit.
 6. E0359-03/04, barley leaf, Universal RNA Kit.
- M1 Perfect Plus™ 1 kb DNA ladder (EURx).
M2 Perfect™ 100-1000 bp DNA ladder (EURx).