

ChargeSwitch® gDNA Micro Tissue Kit

Catalog no. CS11203

25-0818 Version B; 18 July 2008

Follow the steps below to purify up to 5 µg of genomic DNA from micro-dissected samples. For more detailed protocols and additional information, refer to the manual.

1. Before Starting

- 1. Set water bath at 55°C.
- 2. Prepare Lysis Mix – 1 ml Lysis Buffer (L15) and 10 µl Proteinase K per sample.

2. Preparing the Tissue Lysate

- 1. Micro dissect 3-5 mg tissue sample or mouse ear clip.
- 2. Add 1 ml Lysis Mix from Step 2 above.
- 3. Incubate at 55°C overnight or 1-2 hours with vortexing.*
- 4. Remove from incubation and add 5 µl of RNase A.
- 5. Pipet gently up and down until homogenous.
- 6. Incubate at room temperature for 5 minutes.

3. Binding the DNA

- 1. Vortex the ChargeSwitch® Magnetic Beads to resuspend.
- 2. Add 200 µl of Purification Buffer (N5) to sample and pipet gently up and down twice.
- 3. Add 40 µl of Magnetic Beads and pipet gently up and down five times.
- 4. Incubate at room temperature for 1 minute.

Binding the DNA, continued

- 5. Place the tube in the MagnaRack™ for 1 minute.
- 6. Carefully remove supernatant and discard.

4. Washing the Beads

- 1. Remove the tube from the MagnaRack™.
- 2. Add 1 ml of Wash Buffer (W12) and pipet gently up and down twice to resuspend beads.
- 3. Place the tube in the MagnaRack™ for 1 minute.
- 4. Remove the supernatant with a pipette and discard.
- 5. Repeat steps 1–4.

5. Eluting the DNA

- 1. Remove the tube from the MagnaRack™, and add 150 µl of Elution Buffer (E5).
- 2. Pipet gently up and down 10 times to resuspend beads.
- 3. Incubate for 5 minutes at room temperature.
- 4. Place the tube in the MagnaRack™ for 1 minute.
- 5. Remove the eluate containing purified DNA.

*Depending on tissue type. See detailed protocol in the manual.

ChargeSwitch® gDNA Mini Tissue Kit

Catalog no. CS11204

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Follow the steps below to purify up to 30 µg of genomic DNA from small amounts of tissue. For more detailed protocols and additional information, refer to the manual.

1. Preparing the Sample

- 1. Set water bath at 55°C.
- 2. Dissect 0.5 cm tail tip or 20-25 mg tissue sample. For tail tips, place sample in a 1 ml homogenizer.
- 3. Add 1 ml Lysis Buffer (L13). For tail tips, thoroughly homogenize and transfer to 1.5 ml microcentrifuge tube.
- 4. Add 20 µl of Proteinase K and vortex or invert briefly to mix.
- 5. Incubate at 55°C for 1.5-3 hours or until digested.
- 6. Remove from water bath, and centrifuge if necessary.
- 7. Add 10 µl of RNase A, and invert tube to mix.
- 8. Incubate at room temperature for 2 minutes.

3. Binding the DNA

- 1. Vortex the ChargeSwitch® Magnetic Beads to resuspend.
- 2. Add 120 µl of Magnetic Beads and pipet gently up and down five times.
- 3. Add 100 µl of Purification Buffer (N5).
- 4. Pipet gently up and down 10 times.
- 5. Place tubes in the MagnaRack™ for 2 minutes.

Binding the DNA, continued

- 6. Carefully remove supernatant and discard.

4. Washing the Beads

- 1. Remove the tube from the MagnaRack™.
- 2. Add 1 ml of Wash Buffer (W12) and pipet gently up and down twice to resuspend beads.
- 3. Place the tube in the MagnaRack™ for 1 minute or until clear.
- 4. Remove the supernatant with a pipette and discard.
- 5. Repeat steps 1–4 one more time.

5. Eluting the DNA

- 1. Remove the tube from the MagnaRack™.
- 2. Add 250 µl of Elution Buffer (E5).
- 3. Pipet gently up and down twice to resuspend beads.
- 4. Incubate for 5 minutes at 55°C.
- 5. Place the tube in the MagnaRack™ for 2 minutes.
- 6. Remove the eluate containing purified DNA.