

NZY Tissue gDNA Isolation kit

Catalogue number: MB13502, 50 columns MB13503, 50 columns

Support protocol for isolating genomic DNA from buccal swabs

I. Sample preparation

Collect the samples with cotton, dracon* (Daigger), or C.E.P swabs (Gibco BRL). Scrape firmly against the inside of each cheek several times and let the swabs air dry.

II. Pre-lysis of sample

Place the dry swab material in 2 mL microcentrifuge tubes. Add 400-600 μ L PBS buffer (not provided) and 25 μ L Proteinase K solution to the swabs. Mix by vortexing 2 x 10 s and incubate at 56 $^{\circ}$ C for 10 min.

Note: The volume of PBS buffer is dependent on the type of swab used: for cotton and dacron $^{\circ}$ swabs: 400 μ L are sufficient; for C.E.P. swabs: 600 μ L are necessary.

Transfer as much as possible of the lysate solution to a 2 mL microcentrifuge tube (not provided). Discard swab and continue with recovered solution.

III. Lysis of sample

Add one volume buffer NL (400 μ L or 600 μ L – depending on the swab type/volume of PBS buffer used) and vortex vigorously. Incubate the samples at 70 $^{\circ}$ C for 10 min.

IV. Addition of ethanol

Add one volume 96-100% ethanol (400 μL or 600 μL – depending on the swab type) to each sample and mix by vortexing.

V. DNA binding

Transfer 600 μ L of the samples from the 2 ml microcentrifuge into NZYSpin Tissue columns. Centrifuge at 11,000 x g for 1 min. If the samples are not drawn through completely, repeat the centrifugation. Discard flow-through.

Place the columns back into the collection tubes and repeat step 5, depending on the lysis volume.

Proceed with step 7 of the standard protocol.