

Instructions for Isohelix DNA Isolation kits -- DDK-3/DDK-50

STORE COMPONENTS AT CORRECT TEMPERATURES ON ARRIVAL

Product Details.

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Isohelix Buccal DNA Isolation kits have been specifically formulated to produce high DNA yield and purity from Buccal swabs. The kits have been fully optimised at Cell Projects for use on Buccal cell samples and offer reduced handling times, increased DNA yields and many other important technical benefits for their use in manual, 96-well or other HT Formats.

- Optimised to Buccal Cells
- Fast Handling times
- High Purity and Yield
- No solvent based Chemicals

- Protocol Integrated to swabs.
- Manual or HT Formats.
- No Columns or Filtration.
- Less consumables usage

Storage and Stability

The DNA Isolation kits are shipped at ambient temperature, on arrival **PLEASE NOTE** that some of the components should be stored according to the table below upon arrival. The Kits are stable for 2 Years if stored as instructed.

| Vial | Storage Condition |
|-------------|---|
| Solution LS | Room Temperature Approx. +20°C to +22°C |
| Solution PK | +4°C |
| Solution CT | Room Temperature Approx. +20°C to +22°C |
| Solution TE | Room Temperature Approx. +20°C to +22°C |

Kit contents.

Catalogue No: DDK-3 - Trial kit

| Vial | No. | Qty | Contents |
|-------------|-----|--------|----------------------|
| Solution LS | 1 x | 1.5 ml | Lysis/Storage Buffer |
| Solution PK | 1 x | 100 µl | Proteinase K buffer |
| Solution CT | 1 x | 1.5 ml | Capture Buffer |
| Solution TE | 1 x | 500 µl | Re-Hydration Buffer |

One kit contains enough material for 3 extractions.

Catalogue No: DDK-50

| Vial | No. | Qty | Contents |
|-------------|-----|-------|----------------------|
| Solution LS | 1 x | 25 ml | Lysis/Storage Buffer |
| Solution PK | 1 x | 1 ml | Proteinase K buffer |
| Solution CT | 1 x | 25 ml | Capture Buffer |
| Solution TE | 1 x | 10 ml | Re-Hydration Buffer |

One kit contains enough material for 50 extractions.

General Protocol:

Before you start:

1. Prepare 60°C waterbath
2. If a precipitate has formed in Solution LS incubate the tube/bottle at 60°C for few minutes.

DNA extraction from the swab

1. Add 500 µl of LS solution to the tube containing the swab.
2. Add 20 µl of PK. Solution, Vortex briefly

NB: The DNA can be extracted or the sample kept for at least 7 months at room temperature.

3. Place tube in 60°C water bath for 1 hr. Vortex tube briefly
4. Drain swab and discard
5. Transfer the sample (400 µl) into a 1.5ml Centrifuge tube
6. Add equal volume (400 µl) of CT solution to the tube. Invert tube few times or vortex briefly
7. Place in a microfuge(1) tube and spin at approx. 13K rpm for 7 mins to pellet the DNA

NB: The pellet may not be visible

More instructions on next page

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8. Remove the supernatant carefully with a 1 ml pipette tip*
9. Re-spin the tube briefly and remove the rest of the liquid.

NB: Very important to remove all of the liquid

- 10 Add 150 µl of TE Buffer to the tube
- 11 Leave the tube for at least 5 mins at room temp. to re-hydrate the DNA. Vortex briefly
- 12 Incubate tube at 80°C for 5 mins. Vortex and spin the tube briefly (2)

The DNA is now ready for amplification or it can be stored

Store the DNA at +4°C short term and at -20°C long term

Expected yield 2 to 10 µg (10 to 70 ng/µl)

Notes:

(1) Place the tube with hinge positioned outwards, so liquid can be removed from the opposite site.

(2) DO NOT use this step if you require double stranded DNA (e.g. for restriction digests)

**Storage of DNA in LS Solution + PK has been currently tested for 7 months but it is envisaged that further testing over time will show little instability.

Use our DQC-50 kit to test quality of DNA by a quick PCR test before you start your expensive experiments.

Isohelix buccal swabs



Other Cell Projects Products

Isohelix DNA Buccal Swabs.

- High yields, blood alternative, reproducible, easy to use, different formats for various extraction methodologies,

Isohelix DNA Isolation and Handling kits

- DNA stabilising kits for the stable storage of DNA at Room Temperature for long periods -DSK-3/50
- DNA Isolation Kits optimised for swab with buccal cells, no organic solvents, reduced steps, HT formats, No columns or filters --DDK3/50
- DNA quality check by PCR to confirm quality of DNA prior onward experimentation. DQC-50

PCR Products.

- A range of high quality PCR plastic for 96 well format plates and cap strips

Electroporation – The HiMaX electroporation cuvettes and buffers maximise molecular electroporation and electrofusion efficiencies for Bacteria, Yeast, Insect, Plant and Mammalian cells.

Safety and Use of the DDK DNA Isolation kits

The DDK kits are intended for use by qualified professionals trained in potential laboratory hazards and good laboratory practise. If direct information is not available on any of our compounds this should not be interpreted as an indication of product safety.

This kit has been designed solely for research use only

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