

Instructions for Isohelix DNA Quality Check Kit: DQC-10/50

STORE COMPONENTS AT CORRECT TEMPERATURES ON ARRIVAL

Version 2

Revised November 2009

Product Details.

The Isohelix DQC kit is a PCR kit designed to check the quality and presence of the human DNA before you start your full research or testing program. The DQC kit can also be used to compare results obtained using different of DNA Isolation protocols and the presence of PCR inhibitors.

- Checks DNA Quality prior your Research or Testing.
- Use it to select the most efficient Isolation protocol.

Storage and Stability

The DNA Quality Check Kits are shipped at ambient on ice, on arrival the kit should be stored according to the table below upon arrival. The kit is stable for 2 Years if stored as instructed. See box label for expiry date.

Vial	Storage Condition
Primer mix	-20°C
Amp mix	-20°C

REF : DQC-10 Trial Kit

Vial	No.	Qty	Contents
Primer mix	1 x	75µl	Synthetic Oligo's
Amp mix	1 x	130µl	PCR components

One kit contains enough material for 10 reactions.

REF : DQC-50

Vial	No.	Qty	Contents
Primer mix	1 x	0.375 ml	Synthetic Oligo's
Amp mix	1 x	1 ml	PCR components

One kit contains enough material for 50 reactions.

Protocol

1. Mix together 7.5 µl of Human Primer mix and 12.5 µl of Amp mix
2. Add 5 µl DNA (5 to 50 ng). Adjust volume with water if less is added
3. Overlay with mineral oil if necessary.
4. Place in a Thermal Cycler

Cycling profile

Initial denaturation step: 95°C for 5 mins

Then cycle 33 times:

Step 1: 95°C for 30 secs

Step 2: 63°C for 30 secs

Step 3: 72°C for 45 secs

Safety and Use of the DQC kits

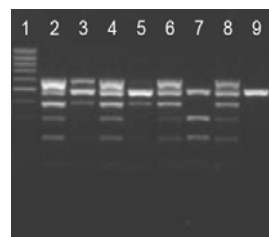
The DQC kits are intended for use by qualified professionals trained in potential laboratory hazards and good laboratory practise. If direct information is not available on any of our compounds this should not be interpreted as an indication of product safety.

This kit has been designed solely for research use only

After cycling, load 10 µl onto 1.75% agarose gel and electrophorese alongside a 100 bp DNA Ladder (not supplied). Make sure that the sample hasn't evaporated during cycling, as this will distort the results.

Interpretation of results:

Expected band sizes: 100, 200, 300, 400, 500 and 600 bp. If all 6 fragments are observed the DNA is not denatured. The 500 bp fragment is derived from an internal control and should always be present (even in negative controls). If not, the PCR has failed and needs repeating.



- Different band intensities can represent different amounts of DNA.
- If less than 6 fragments are seen the DNA is probably partially degraded.
- If only the 500bp control fragment is seen the DNA is de-natured or has not been added.

- 1 100bp ladder
- 2 Good Quality DNA – 6 bands present
- 3 Good Quality DNA – 6 bands present but lower yield so bands less intense
- 4 Good Quality DNA – 6 bands present
- 5 Poor Quality DNA – uneven amplification indicates partially degraded DNA
- 6 Good Quality DNA – 6 bands present
- 7 Poor Quality DNA – some bands missing
- 8 Good Quality DNA – 6 bands present
- 9 Negative Control – 500bp internal control shows PCR worked

Other Products for DNA sample handling

Isohelix Buccal Swabs SK-1S, SK-2S, SK-3S, SK-4S:

High yields, alternative to blood, reproducible, easy to use, different formats for various extraction methods.

Silica gel capsules SGC 3/50:

For use with SK-1 swab kits, air-dries swab in tube giving extended storage times without loss of stability.

Isohelix DNA Isolation Kits DDK 3/50:

Optimised for buccal cells, no organic solvents, reduced steps, HT formats, No columns or filters.

Isohelix is a division of Cell Projects

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