

Data Sheet

One Step Human Mitochondrial DNA Detection Kit (100 rxn)-Cat# CB-97100-501

- Introduction:** This kit contains a complete set of buffers to release the mitochondrial DNA (mtDNA) and QPCR amplification systems, suitable for rapid determination of human mtDNA copy number in human tissues or cell lines by the comparison of mtDNA and genomic DNA (nDNA) measured by QPCR. QPCR amplification can be performed directly in the tissue/cell lysate, without DNA purification, which greatly save time and money and increase the accuracy of mtDNA content determination.
- Kit Contents:**
 - (1) One step ready to use, sample lysis buffer, 25 ml
 - (2) Validated specific primers to quantify the mtDNA, 600 ul and genomic DNA, 600 ul
 - (3) 2x SYBR green master mixture, 1 ml
- Sample preparation**

10 mg tissue (cells from one well of the 6-wells plate or 10cm dish) + 200 μ L One step tissue/cell lysis buffer, 56°C Overnight.

Vortex for 20 second, dilute the digested samples in water 500 μ L water+ 6 μ L digested sample).
- QPCR Reaction (20 μ L):**

5 μ L mixed forward primer and reverse primers
 10 μ L 2x SYBR green master mixture
 5 μ L sample
- QPCR Condition:** 95°C 10 min; then 95°C 10s, 60°C 15s, 72°C 15s for 45 cycles.
- Example:**

