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# Mitochondrial Copy Number PCR-Based Kits

## Real-Time PCR DNA Mitochondrial Quantification for Human, Mouse and Rat

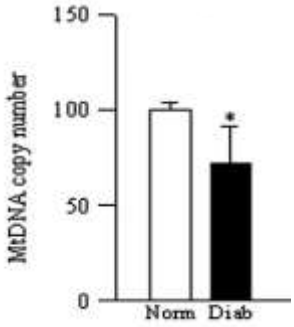
## Human Catalog # MCN1
## Rat Catalog # MCN2
## Mouse Catalog # MCN3

**This DNA analysis kit is for the determination of human mitochondrial DNA copy number, *in vivo* and *in vitro,* by the comparison of mitochondrial (mt) and nuclear (n) DNA measured by real-time PCR. This kit allows for duplicate analysis of up to 22 samples (44 reactions).**

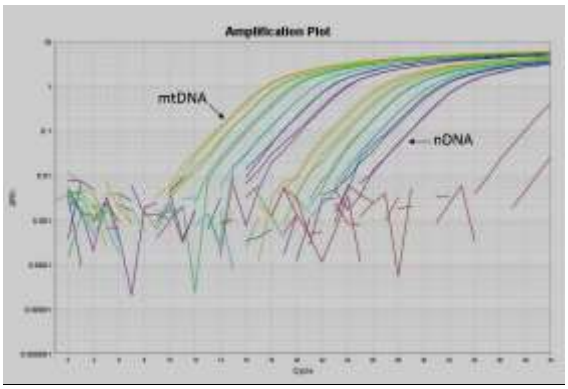
### Kit Contents:

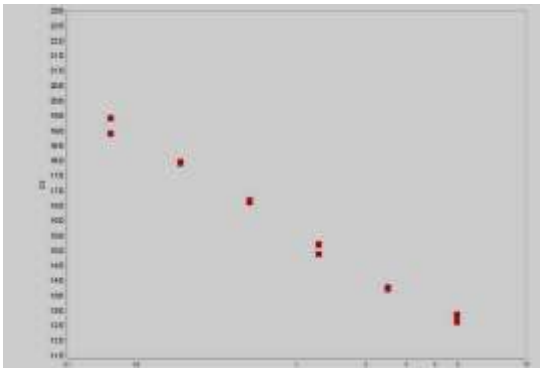
- **96 well PCR plate with cover**
- **rtPCR reaction mix.**
- **Validated primers to quantify mitochondrial DNA.**
- **Validated primers to quantify nuclear DNA.**
- **Positive control isolated from total DNA (1.825 ng/ µl).**

**Recommended concentration:** between 3.75-0.5 ng/ml
**Results representation:** Mt copy number (ΔCT mtDNA/ ΔCT nDNA)




Comparison of mitochondrial DNA copy number in retina from normal and diabetic patients. Santos et.al. Free Radical Biology & Medicine 51: 1849-1860, 2011.



Left: Real-Time PCR Amplification Plots of rat positive control; Right: Representative Real-Time analysis of mitochondrial DNA

(References on back page)

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