

Название публикации:

A Method for Measuring the Heteroplasmy Level of Mitochondrial DNA Mutations

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Аннотация:

This paper presents a method for measuring the heteroplasmy level of mitochondrial DNA mutations, which is based on real-time PCR using TaqMan fluorescent probes. The method makes it possible to detect the heteroplasmy level of mtDNA mutations and has high accuracy and resolution. It shows significant differences between the parameters of heteroplasmy of patients belonging to different groups by the degree of disease. Application of this method, in particular, to determine the predisposition to atherosclerosis, makes it possible to determine whether the patient belongs to a low-, medium-, or high-risk group of atherosclerosis.

Ключевые слова:

Heteroplasmy, mitochondrial genome, mutation, real-time PCR, fluorescent dye, mitochondrial DNA, accuracy, acute heart infarction, adult, algorithm, Article, atherosclerosis, blood cell, controlled study, disease predisposition, DNA denaturation, DNA isolation, DNA sequence, female, fluorescence, gene amplification, gene frequency, gene mutation, heteroplasmy, high resolution melting analysis, high risk population, human, human genome, informed consent, major clinical study, male, priority journal, real time polymerase chain reaction, regression analysis, reproducibility, statistics, temperature, ultrasound, ultraviolet spectrophotometry, venous blood