



MITOCHONDRIAL ISOLATION METHODS: A REVIEW

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ABSTRACT

Mitochondria are organelles responsible for the generation of metabolic energy. The influence of mitochondria on critical cellular processes underscores the importance of the in-depth study of these organelles. Mitochondrial isolation techniques have been used to understand the function and influence of these organelles on health, disease, and aging. Efficient isolation of these organelles is necessary for researchers to understand the function of mitochondria. Most classical isolation methods that exist are time and sample consuming. New developments are taking place to improve the efficiency of mitochondrial isolation. Novel techniques have been introduced in the recent past paving way to better understanding of mitochondrial activity. In this review, several isolation techniques are discussed including recent advancements.

Keywords: *mitochondria, centrifugation, culture medium, organelle, permeabilization*