

Mitochondria Storage Buffer

(Catalog# M1104-25; 25 ml; Store at 4°C)

rev. 09/16

I. Introduction:

Mitochondria are the powerhouse of the cells because they generate most of the supply of energy in the form of adenosine triphosphate (ATP). Mitochondria are double membrane organelles: an outer membrane and a folded inner membrane called cristae. Isolated mitochondria are the sample of choice to study mitochondrial respiration, assembly of the respiratory complexes, apoptosis, mtDNA and mtRNA, and mitochondrial protein profiling. BioVision's Mitochondria Storage Buffer has been developed for the storage of intact mitochondria for functional studies.

II. Application:

Enzyme Activity Assay

III. Sample Types:

Animal Tissues, Cell Culture

IV. Storage and Handling:

Store buffer at 4°C, protected from light. Read the entire protocol before performing the assay

V. User supplied reagents:

Purified Mitochondria

VI. Tissue Protein Extraction Reagent Protocol:

Resuspend the isolated mitochondria in Mitochondria Storage Buffer. Determine the protein concentration and adjust to the desired protein concentration with Mitochondria Storage Buffer. Keep on ice for immediate downstream applications or snap freeze in liquid nitrogen & store at -80°C for future use. BioVision's Mitochondria Storage Buffer yields intact mitochondria for functional studies.

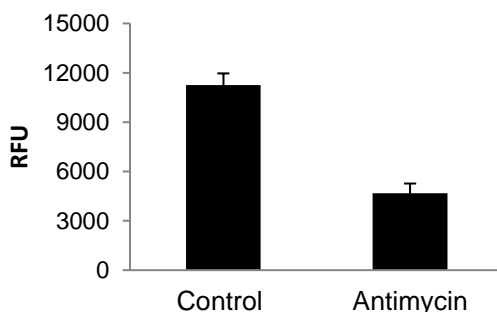


Figure 1: Mitochondrial Membrane Potential: Purified mitochondria stored in Mitochondria Storage Buffer were incubated with JC-1 dye (1 µg/ml) for 15 minutes at 37°C. Mitochondrial membrane potential was dissipated by Antimycin A (100 µM), which resulted in reduced fluorescence signal.

RELATED PRODUCTS:

Mitochondria/Cytosol Fractionation Kit (Cat# K256-25, -100)

Cytosol/Particulate Separation Kit (Cat# K267-50)

Mitochondrial DNA Isolation Kit (Cat# K280-50)

VDAC/Porin Antibody (Cat# 3594-100)

JC-1 (Mitochondrial Membrane Potential Dye) (Cat# 1130-5)

Cytochrome c (Cat# 2120-20, -100)

Cytochrome c Antibody (Cat# 3025-30T, -100; 3026-100; 3352-100; 3353-100)

Cytochrome c Apoptosis Assay Kit (Cat# K257-100)

Cytochrome c Blocking peptide (Cat# 3025BP-50; 3352BP-50; 3353BP-50)

Cytochrome P450 Antibody (Cat# 3084R-100)

Antimycin A (Cat# 2247-15, -50)

Valinomycin (Cat# 2238-10, -50)

FOR RESEARCH USE ONLY! Not to be used on humans