

XF Cell Mito Stress Test Kit

Profile mitochondrial function in cells

*Seahorse...
the standard for
measuring cell
metabolism.*

Everything you need to measure mitochondrial function in cells

Measurements of mitochondrial function are essential to understanding cancer, aging, and metabolic, cardiovascular, and neurodegenerative diseases. The **XF Cell Mito Stress Test Kit** makes it easy to measure the four key parameters of mitochondrial function in a microplate: basal respiration, ATP production, proton leak, and maximal respiration, revealing critical information not evident in basal metabolism measurements alone.

Now you can confidently quantify cellular bioenergetics, identify mitochondrial dysfunction, and measure cells' response to stress.



*"Without oxygen measurements,
cellular bioenergetics would be in
the dark ages."*

—David Nicholls
Buck Institute &
Lund University

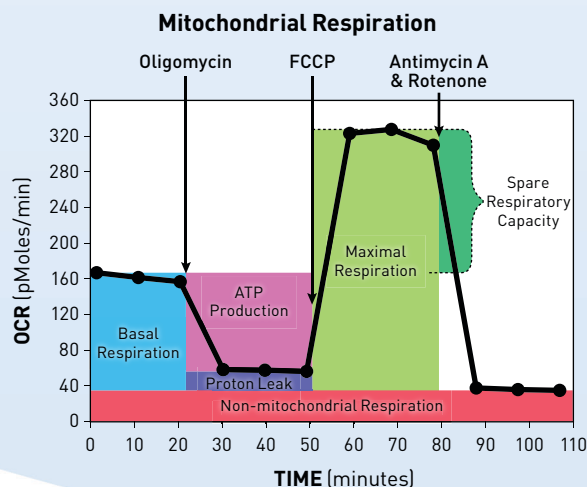
XF Cell Mito Stress Test Kit

- Complete, easy-to-use kit for 6 microplates
- Software wizard guides assay optimization, design, and interpretation
- Designed for the XF Analyzers

Using the pre-calibrated, pre-tested reagents, the **XF Cell Mito Stress Test Kit** reveals the complete mitochondrial stress profile, while new algorithms automatically calculate the most important metrics, simplifying your work.

Mito Stress Test Profile

- Basal Respiration
- ATP Production
- Proton Leak
- Maximal Respiration
- Spare Respiratory Capacity
- Non-mitochondrial Respiration



XF Cell Mito Stress Test Kit

Measure basal respiration, ATP production, proton leak, and spare respiratory capacity.

Each **XF Cell Mito Stress Test Kit** eliminates the questions and concerns of where to source the reagents, what concentrations are optimal, and best storage conditions. Each convenient kit contains enough reagents to run six XF24 or XF96 microplates, allowing you to run a full mitochondrial profile in each well. With the reagents now ready at your fingertips, the **XF Cell Mito Stress Test Kit** is your ultimate tool for assay optimization.

Kit Contents

- Pre-calibrated, pre-tested reagents:
 - Oligomycin (ATP Coupler)
 - FCCP (ETC Accelerator)
 - Antimycin A (Mito Inhibitor A)
 - Rotenone (Mito Inhibitor B)
- DMSO (Solvent)

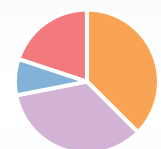
Ordering Information

Product: XF Cell Mito Stress Test Kit
Part #: 101706-100

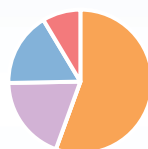
Store at -20°C



Mito Stress Test Measures



Rat Aortic Smooth Muscle Cells



Primary Neonatal Rat Ventricular Myocytes

- Spare Capacity
- Coupling Efficiency
- Proton Leak
- Non-Mitochondrial Respiration



XF96 Analyzer



XF24 Analyzer

Learn more with our On-Demand Webinars at www.seahorsebio.com

Profiling mitochondrial function has never been so easy: A tutorial on the new XF Cell Mito Stress Test Kit

David Ferrick, PhD, CSO, Seahorse Bioscience

Mitochondrial profiling in cells under physiological conditions and in response to stress

Victor Darley-USmar, PhD, University of Alabama at Birmingham

Spare respiratory capacity and the bioenergetics of the nerve terminal

David Nicholls PhD, FRSE, Buck Institute for Age Research & Lund University

The rate and coupling efficiency of oxidative phosphorylation in mitochondria and cells

Martin Brand, PhD, Buck Institute & MRC Dunn Nutrition Unit

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