

AGILENT SEAHORSE XF CELL ENERGY PHENOTYPE TEST KIT

The Only Method to Measure the Metabolic Potential of Your Cells

Rapid Metabolic Phenotyping of Live Cells

Gene and protein expression are often used as markers of metabolic changes in your cell. However, a functional assay with live cells is required to confirm a physiologically relevant change in metabolism. Because cells use a combination of mitochondrial respiration and glycolysis to satisfy energy and biosynthetic needs, the ability to assess the balance between them delivers insight that no single metric can provide. By simultaneously measuring the relative utilization of these two major energy pathways, under both basal and stressed conditions, you can quickly realize the functional consequence of genetic changes.

Rapid screening, functional phenotyping, unique insight

Using proven Agilent Seahorse XF technology, the Agilent Seahorse XF Cell Energy Phenotype Test provides a standard method to determine baseline phenotype, stressed phenotype, and metabolic potential. These key parameters of metabolic function reveal the energy phenotype of your cells.

Agilent Seahorse XF Cell Energy Phenotype Profile

- **Baseline phenotype:** Measurement of the cells' relative utilization of mitochondrial respiration and glycolysis under starting conditions
- **Stressed phenotype:** Measurement of the cells' relative utilization of mitochondrial respiration and glycolysis when stressed
- **Metabolic potential:** Measurement of the cells' ability to meet an energy demand via mitochondrial respiration and glycolysis



Agilent Seahorse XF Cell Energy Phenotype Test Kit

Provides the reagents needed to determine metabolic phenotypes in an easy-to-use format

Delivers functional data about the relative metabolic activity and metabolic potential of your cells

Enables rapid screening of compounds that effect glycolysis and mitochondrial respiration

For more information, visit:
www.agilent.com

Reproducible Assay of Cell Health

Combining quality controlled, premeasured reagents with real-time, label-free detection provided by the Seahorse XF Extracellular Flux Analyzer, the Seahorse XF Cell Energy Phenotype Test quickly and easily measures mitochondrial respiration and glycolysis under both basal and stressed conditions to provide the energy phenotype of your cells. The dedicated Report Generator automatically determines and displays the energy phenotype, as well as the metabolic potential of your samples, which simplifies data analysis and interpretation.

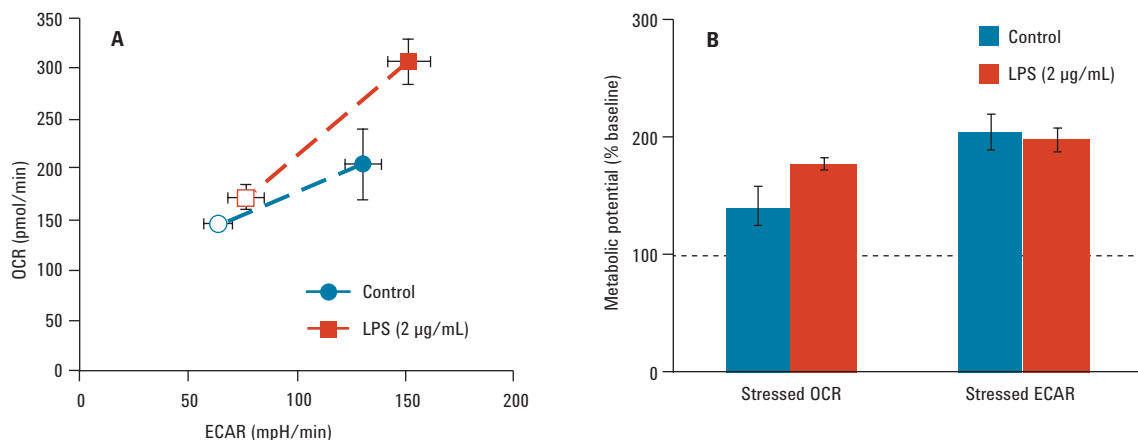
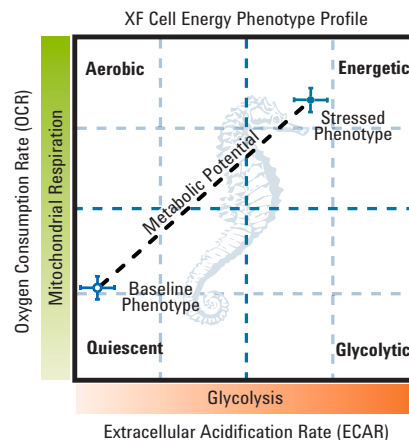


Figure 1. Macrophages become activated in response to antigens such as bacterial LPS. A) Exposure of the RAW 264.7 macrophage cell line to LPS for 1 hour caused a small increase in baseline activity (open symbols) but a large increase in utilization of both pathways in response to mitochondrial stressors (closed symbols). B) Priming these cells with antigen increased their aerobic potential as shown by the difference in stressed OCR between the control (blue) and treated (red) values.

Product Information

Component	Description
Product	Agilent Seahorse XF Cell Energy Phenotype Test Kit
Kit contents	12 single-use reagent pouches, each containing oligomycin and FCCP
Number of assays	12 XF Microplate assays
Shipping conditions	Ships at ambient temperature
Storage requirements	Store at room temperature (for up to 1 year)

Kit part number	For platform(s)
103325-100	All 24- and 96-well XF Analyzers
103275-100	XFp Analyzers



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