

# Seahorse XFp Cell Energy Phenotype Test Kit

The only method to measure the metabolic potential of your cells

## Determine the Metabolic Phenotype and Potential of Your Cells in an Hour

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.



### Seahorse XFp 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 potential of your cells
- Enables pairwise comparisons to verify genetic or treatment differences in live cells

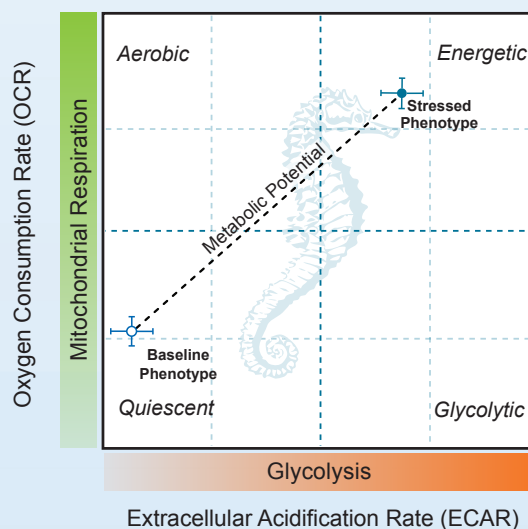
### Rapid Phenotyping | Functional Data | Unique Insight

Using proven Seahorse XF technology and as few as 5,000 cells per well, the 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 Seahorse XF Cell Energy Phenotype of your cells.

#### 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.

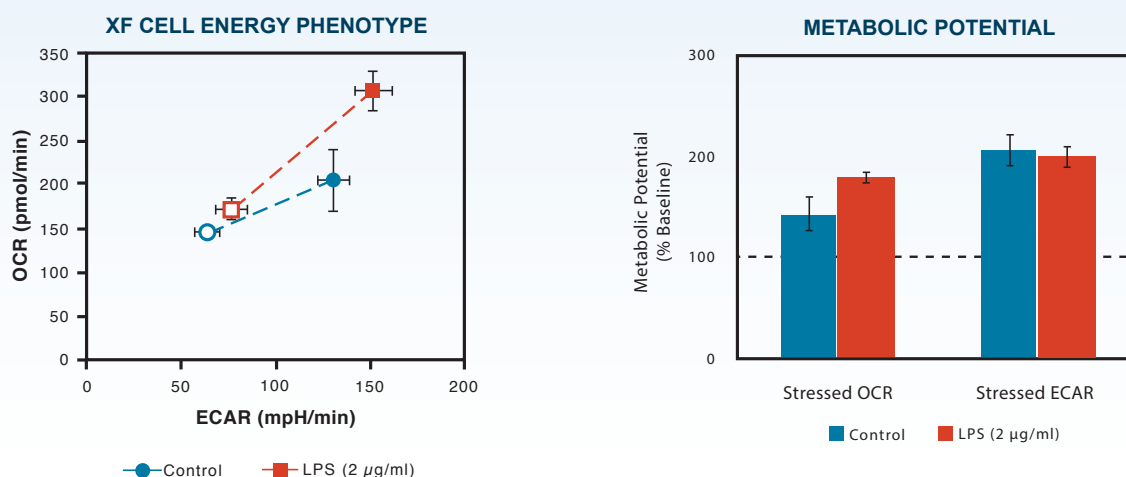
#### Seahorse XF Cell Energy Phenotype Profile



## Seahorse XFp Cell Energy Phenotype Test Kit

### Generate a metabolic phenotype in an hour

Combining quality controlled, pre-measured reagents with real time, label-free detection provided by the Seahorse XFp Analyzer, the Seahorse XFp Cell Energy Phenotype Test Kit can quickly and easily measure 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

For use with the Seahorse XFp Analyzer

<b>Product</b>	Seahorse XFp Cell Energy Phenotype Test Kit
<b>Part Number</b>	103275-100
<b>Kit Contents</b>	12 single-use reagent pouches, each containing oligomycin and FCCP
<b>Number of Assays</b>	12 XFp Miniplate assays
<b>Shipping Conditions</b>	Ships at ambient temperature
<b>Storage Requirements</b>	Store at room temperature (For up to 1 year)



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