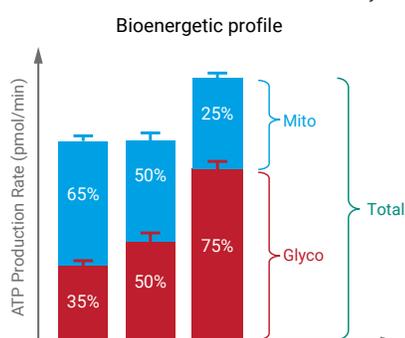


# Agilent Seahorse XF Real-Time ATP Rate Assay Kits

A better measure of cellular function

Seahorse XF Real-Time ATP Rate Assay



## Agilent Seahorse XF Real-Time ATP Rate Assay

- Quantitative, simultaneous measurements of mitoATP and glycoATP production rates, which provides insight on the energy mechanisms driving cell behavior and function.
- Real-time kinetic assay in live cells.
- Easy to run assay with integrated data processing tools for post-assay analysis.
- Optimized single-use format for simplified workflow and reduced assay complexity.



## A Novel XF Assay to Assess Cellular ATP Kinetics

Agilent Seahorse now offers a novel assay that quantifies ATP production rates from mitochondrial respiration and glycolysis in real time with live cells. This assay utilizes XF technology to detect mitochondrial Oxygen Consumption Rates (OCR) and glycolytic Extra-Cellular Acidification Rates (ECAR) which are then transformed to mitoATP and glycoATP production rates using well-validated algorithms. Total ATP production rates are also reported.

## More Informative, a Better Measure than the End-Point Total ATP Level Assays

Cellular ATP levels are maintained through a highly regulated system that allows cells to respond to changes in ATP demand via changes in ATP production rates, maintaining constant cellular ATP levels under physiological conditions. Assays that measure total ATP levels do not provide dynamic information regarding cellular activities and energy demand. In contrast, real-time quantification of ATP production offers a more informative approach to assess the interplay between energy metabolism and cellular functions in response to gene modification, compound exposure and/or other types of interventions.

## A Definitive Quantification of Metabolic Switching and Pathway Liabilities

Metabolic switching reveals the ability of a cell to compensate for a reduced or lost function of one pathway through an alternative pathway to meet energy demands for cellular activities. The Seahorse XF Real-Time ATP Rate Assay provides reliable metrics from mitochondrial and glycolytic pathways, thereby, enables researchers to quantify metabolic switching in response to modulators or uncover pathway or fuel liabilities.

## Product Information

- The Seahorse XF Real-Time ATP Rate Assay is supported by XFe96, XFe24, XFp, and XF96 Analyzers. This assay is not compatible with Seahorse XF24 or XF24-3 Analyzers.
- Phenol red-free media containing HEPES are required to perform this assay. Seahorse XF DMEM or RPMI Medium, pH 7.4 (Cat Number 103575-100 or 103576-100) is recommended for optimal results.
- Each kit contains six (6) single-use reagent pouches, each containing one (1) vial of oligomycin and one (1) vial of rotenone/antimycin A mixture. Each pouch contains enough reagent for a single assay plate.
- Kits are shipped at ambient temperature and stored at room temperature.

## Ordering Information

Catalog Number	Description	Compatible with
103591-100	Seahorse XFp Real-Time ATP Rate Assay Kit	XFp Analyzer
103592-100	Seahorse XF Real-Time ATP Rate Assay Kit	XFe96, XFe24, XF96 Analyzers
<b>Related Products</b>		
103575-100	Seahorse XF DMEM Medium, pH 7.4, 500 mL	XFe96, XFe24, XF96, XFp Analyzers
103576-100	Seahorse XF RPMI Medium, pH 7.4, 500 mL	XFe96, XFe24, XF96, XFp Analyzers
103577-100	Seahorse XF 1.0 M Glucose Solution, 50 mL	All Analyzers
103578-100	Seahorse XF 100 mM Pyruvate Solution, 50 mL	All Analyzers
103579-100	Seahorse XF 200 mM Glutamine Solution, 50 mL	All Analyzers

USA and Canada:

**1-800-227-9770**

**seahorse.support@agilent.com**

Europe:

**seahorse.support@agilent.com**

Asia Pacific:

**seahorse.support@agilent.com**

[www.agilent.com/chem/discoverXF](http://www.agilent.com/chem/discoverXF)

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