



Standardized, optimized, live-cell metabolic assays for use  
with Agilent Seahorse Analyzers

# AGILENT SEAHORSE XF ASSAY KITS AND REAGENTS



# AGILENT SEAHORSE XF TEST KITS AND REAGENTS



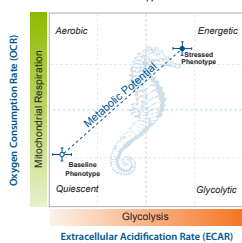
Agilent offers a wide range of unique high quality Seahorse XF assay kits, reagents, and media for studying cellular function, including metabolism and energetics, and assessing mitochondrial and glycolytic function in real time. These kits are designed to simplify workflow and improve research productivity, enabling generation of higher quality and more consistent data with less effort on your Seahorse XF Analyzer. Together with Agilent's excellent technical support, these kits will greatly enhance your overall experience of performing XF assays.

## Key features and benefits include:

- An optimized open-and-go format for simplified protocol and reduced assay complexity
- Compounds are reconstituted directly in assay medium – eliminating the need for DMSO or other solvents
- Single-use concept to reduce waste and eliminate need for storage of used compounds
- Rigorously tested and validated for every lot with cells to deliver consistent and robust results eliminating the cost associated with failed experiments

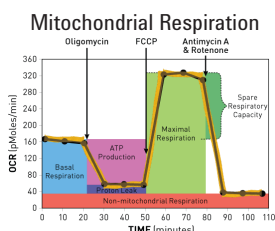
## Agilent Seahorse XF Cell Energy Phenotype Test Kit (Cat No. [103325-100](#) and Cat No. [103275-100](#))

### XF Cell Energy Phenotype Test Metabolic Phenotype & Potential



This simple assay kit simultaneously measures the two major energy producing pathways in live determination cells - mitochondrial respiration and glycolysis, allowing rapid of energy phenotypes of cells and investigation of metabolic switching. It is also a useful assay for screening compounds that potentially modulate mitochondrial and/or glycolytic function.

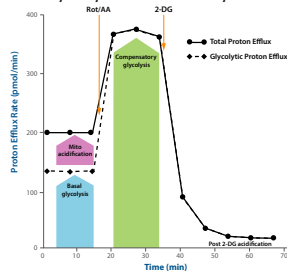
## Agilent Seahorse XF Cell Mito Stress Test Kit (Cat No. [103015-100](#) and Cat No. [103010-100](#))



The Gold Standard Assay Kit for measuring mitochondrial respiration and studying important biological events such as cellular activation, proliferation, differentiation, and dysfunction. By quantifying mitochondrial respiration in basal and stressed states, one may investigate functional differences among cell types, drug candidates, as well as genetic or biochemical interventions.

## Agilent Seahorse XF Glycolytic Rate Assay Kit (Cat No. [103344-100](#) and Cat No. [103346-100](#))

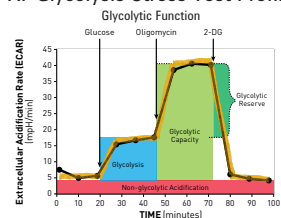
XF Glycolytic Rate Assay Profile



This assay is an optimized complete solution (kit, media, software) that quantifies the rate of glycolytic activity in live cells by accounting for both glycolytic and mitochondrial (CO<sub>2</sub>) acidification. The kit delivers robust, informative and precise glycolysis data that enables the study of transient responses and metabolic switches in cellular disease models. This low cost, real-time, functional assay is a superior alternative to the end-point Lactate assay.

## Agilent Seahorse XF Glycolysis Stress Test Kit (Cat No. [103020-100](#) and Cat No. [103017-100](#))

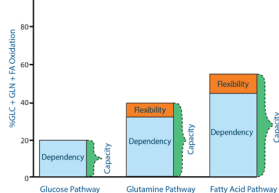
XF Glycolysis Stress Test Profile



A relative test kit of glycolytic function in live cells, this assay measures the capacity of the glycolytic pathway by driving cells toward glycolysis and assesses the ability of study models to increase glycolytic activity to meet metabolic and bioenergetic demands.

## Agilent Seahorse XF Mito Fuel Flex Test Kit (Cat No. [103260-100](#) and Cat No. [103270-100](#))

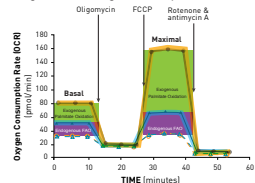
XF Mito Fuel Flex Test Profile  
Mitochondrial Function



A method for measuring basal state mitochondrial fuel oxidation in live cells. This assay kit utilizes a set of inhibitors to reveal the cells' ability to switch oxidative pathways in meeting basal energetic demands and provides information regarding the relative contributions of glucose, glutamine and long chain fatty acid oxidation to basal respiration.

## Agilent Seahorse XF Palmitate-BSA FAO Substrate (Cat No. [102720-100](#))

XF Fatty Acid Oxidation Profile  
Exogenous & Endogenous Fatty Acid Oxidation



A bio-available substrate for in vitro studies of long chain fatty acid (LCFA) oxidation by intact cells. Commonly used with the Cell Mito Stress Test kit. Enable to investigate how LCFA oxidation responds to a genetic manipulation or drug treatment. Best used for assays in which the cells are partially or completely dependent on exogenous LCFAs for maximal respiration and responses to stress.

## Agilent Seahorse XF Plasma Membrane Permeabilizer (Cat No. [102504-100](#))



Performing isolated mitochondria type assays without isolating mitochondria! This exclusive reagent permeabilizes plasma membrane of intact cells in culture without damage to mitochondrial membranes, enables experimental control of substrate provision to the mitochondria, and allows for detailed characterization of key components in mitochondrial function, e.g. transporters, enzymes and electron transport chain complexes. This reagent can also be used in other assays involving cell permeabilization, including perforated patch, dye loading, and muscle physiology.

## Product Ordering Information

Cat No.	Product Description	Unit	Product Content	Compatible Analyzer
<b>103325-100</b>	Seahorse XF Cell Energy Phenotype Test Kit	EA	12 pouches <sup>1</sup>	XFe96, XF96, XFe24, XF24
<b>103015-100</b>	Seahorse XF Cell Mito Stress Test Kit	EA	6 pouches <sup>1</sup>	XFe96, XF96, XFe24, XF24
<b>103020-100</b>	Seahorse XF Glycolysis Stress Test Kit	EA	6 pouches <sup>1</sup>	XFe96, XF96, XFe24, XF24
<b>103260-100</b>	Seahorse XF Mito Fuel Flex Test Kit	EA	6 pouches <sup>1</sup>	XFe96, XF96, XFe24, XF24
<b>103344-100</b>	Seahorse XF Glycolytic Rate Assay Kit	EA	6 pouches <sup>1</sup>	XFe96, XF96, XFe24
<b>S7805A</b>	Seahorse XF Glycolytic Rate Assay Starter Pack	EA	1 XF Glycolytic Rate Assay kit 1 30-mL 1M HEPES buffer 1 500-mL XF base medium, phenol red free	XFe96, XF96, XFe24
<b>103275-100</b>	Seahorse XFp Cell Energy Phenotype Test Kit	EA	12 pouches <sup>2</sup>	XFp
<b>103010-100</b>	Seahorse XFp Cell Mito Stress Test Kit	EA	6 pouches <sup>2</sup>	XFp
<b>103017-100</b>	Seahorse XFp Glycolysis Stress Test Kit	EA	6 pouches <sup>2</sup>	XFp
<b>103270-100</b>	Seahorse XFp Mito Fuel Flex Test Kit	EA	6 pouches <sup>2</sup>	XFp
<b>103346-100</b>	Seahorse XFp Glycolytic Rate Assay Kit	EA	6 pouches <sup>2</sup>	XFp
<b>S7806A</b>	Seahorse XFp Glycolytic Rate Assay Starter Pack	EA	1 XFp Glycolytic Rate Assay kit 1 30-mL 1M HEPES buffer 1 500-mL XF base medium, phenol red free	XFp
<b>102720-100</b>	Seahorse XF Palmitate-BSA FAO Substrate	EA	3 x 3 mL Palmitate-BSA 3 x 3 mL BSA controls	All XF Analyzers
<b>102504-100</b>	Seahorse XF Plasma Membrane Permeabilizer	EA	1 vial of 25 µL PMP in 10 µM concentration	All XF Analyzers
<b>102353-100</b>	Seahorse XF Base Medium (2 x 1L)	2/pk		All XF Analyzers
<b>102365-100</b>	Seahorse XF Assay Medium (2 x 1L), w/GlutaMax	2/pk		All XF Analyzers
<b>103334-100</b>	Seahorse XF Base Medium, 500 mL	EA		All XF Analyzers
<b>103193-100</b>	Seahorse XF Base Medium, 100 mL	EA		All XF Analyzers
<b>103335-100</b>	Seahorse XF Base Medium - phenol free, 500 mL	EA		All XF Analyzers
<b>103336-100</b>	Seahorse XF RPMI medium, without phenol red, 500 mL	EA		All XF Analyzers
<b>103337-100</b>	Seahorse HEPES (1M), 30 mL	EA		All XF Analyzers

<sup>1</sup> One XF pouch contains sufficient reagents to run one 24-well or 96-well plate

<sup>2</sup> One XFp pouch contains sufficient reagents to run one 8-well mini-plate

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