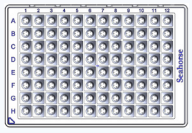
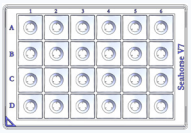
Seahorse XF Instrument Selection Guide

The Power of XF Technology for Every Lab

	Seahorse XFp Analyzer	Seahorse XF^{e}96 Analyzer	Seahorse XF^{e}24 Analyzer
			
Plate Format			
Microchamber Volume	2 µL	2 µL	7 µL
Controller	Integrated full-color, touch-screen interface to design basic protocols and run imported templates.	Combination computer and touch-screen display with full assay design, control, and analysis capability.	Combination computer and touch-screen display with full assay design, control, and analysis capability.
Software	Create and run standard assays on XFp Analyzer or design on Wave Desktop. Transfer to Wave Desktop for analysis.	Design and analyze assay templates on Controller or Wave Desktop.	Design and analyze assay templates on Controller or Wave Desktop.
Best For	• Pairwise comparisons • Phenotyping single samples • Precious biomaterial • Patient-derived samples • Assay temperatures other than 37°C	• Phenotypic screening • Testing many conditions at one time • Dose-response studies • Spheroids	• Islets • Larger samples
Key Advantages	• Easy to set up and run via streamlined interface • Standard protocols for XF assays • Validated for assay temperatures 16-40°C (lower ambient temp required)	• Maximum experimental flexibility • Highest throughput • Validated for hypoxia	• Balances throughput and budget considerations

All Seahorse XF Analyzers Feature:

- Compatibility with both adherent and suspension cells as well as isolated mitochondria.
- Ability to perform up to 4 independent injections per well with automatic mixing.
- Automatic calculation of oxygen consumption rate (OCR) and extracellular acidification rate (ECAR).
- Simultaneous measurement of OCR and ECAR in the same well.
- Sensitivity for small sample sizes.
- Label-free detection in live cells, in real time.
- Windows-compatible desktop analysis software (Wave) for plotting, reporting, analyzing, and exporting your Seahorse XF data.

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Cell Lines & Seeding Density

Cell Line	Seahorse XFp Analyzer/ XF^{e}96 Analyzer Seeding Density Range of Cells/Well	Seahorse XF^{e}24 Analyzer Seeding Density Range of Cells/Well
3T3-L1 - Preadipocytes	5 - 7 x 10^3	10 - 40 x 10^3
A549 Cells	1.5 x 10^4	3 - 4.5 x 10^4
Astrocytes	5 - 20 x 10^3	50 - 100 x 10^3
BMDM	8 x 10^4	10 - 50 x 10^4
C2C12	1 -2 x 10^4	2 - 3 x 10^4
Cardiomyocytes (primary)	3 - 5 x 10^4	4 - 15 x 10^4
Cortical Neurons (primary)	1 - 4 x 10^4	5 - 10 x 10^4
Dermal Fibroblasts	2 - 4 x 10^4	1 - 5 x 10^4
H9C2	1 - 2 x 10^4	2 - 5 x 10^4
HCT116	1 - 2 x 10^4	3 - 5 x 10^4
HEK 293	2 - 5 x 10^4	5 x 10^4
HeLa	1 - 3 x 10^4	1 - 5 x 10^4
Hepatocytes (primary)	1 x 10^4	1 - 4 x 10^4
HepG2	1 - 3 x 10^4	4 - 5 x 10^4
HUVEC	1 x 10^4	2 - 3 x 10^4
iPSC	5 x 10^3	50 - 70 x 10^3
Isolated mitochondria	1 - 5 µg/well	2 - 10 µg/well
Jurkat	1 x 10^5	2 - 3 x 10^5
MCF10A	1 - 3 x 10^4	2 - 4 x 10^4
MCF7	2 x 10^4	2 - 4 x 10^4
MDA-MB-231	1 - 2 x 10^4	3 - 5 x 10^4
MEF	1 x 10^4	1 - 4 x 10^4
PC12	8 x 10^4	1.6 - 2.4 x 10^5
RAW 264.7	8 x 10^4	1.6 - 2.4 x 10^5
T-cells (primary)	1 - 2 x 10^5	3 - 10 x 10^5

For additional infomation please visit the
Cell Reference Database
www.seahorsebio.com/learning/cell-line.php

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