**Brand**: Agilent

Model: Seahorse XFe24 Analyzer

Location: K635 Room, 6th Floor, K Building, Phayathai Campus

Custodian : Tadtarit Anujareewat

## Service Fee:

SC staff	Mahidol	Government	Private
220 Baht/hour	400 Baht/hour	500 Baht/hour	600 Baht/hour
5000 Baht/day	8000 Baht/day	10,500 Baht/day	13,500 Baht/day

## Description and Specification:

Agilent Seahorse XFe24 Analyzers measure the oxygen consumption rate (OCR) and extracellular acidification rate (ECAR) of live cells in a 24-well plate format. OCR and ECAR rates are key indicators of mitochondrial respiration and glycolysis as well as ATP production rate, and together these measurements provide a systems-level view of cellular metabolic function in cultured cells and ex-vivo samples.

	Agilent Seahorse XFe24 Analyzer	
Plate Format	Microplate	
Number of Assay Wells	24	
Microchamber volume	5.65 μL	
Recommended Injection Volume	75 μL	
Controller	Combination computer and touch screen display with full assay design, control, and analysis capability.	
Software	Design and analyze assay templates on Controller or Wave desktop.	
Best For	<ul><li>Islets</li><li>Larger samples</li></ul>	
Key Advantages	<ul> <li>Tested for hypoxia</li> <li>Support for assay temperatures 16-42°C (12-20°C lower ambient temperature required)</li> <li>Balances throughput and budget considerations</li> </ul>	

## **Key Features:**

- Compatibility with both adherent and suspension cells as well as isolated mitochondria and non-mammalian samples.
- 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 real time
- Windows-compatible desktop analysis software (Wave) and web-based data analysis software (Agilent Seahorse Analytics) for plotting, reporting, analyzing, and exporting your XF data.

## Applications:

- Immune Metabolism
- Cancer Metabolism
- Cellular Metabolism in Early Drug Discovery
- Host-Pathogen Metabolism
- Stem Cell Metabolism
- Neuronal Metabolism
- Mitochondrial and Safety Toxicology
- Cardiovascular Metabolism
- Environmental Cellular Toxicity Research