

Pyruvate Assay for Cedex Bio and Cedex Bio HT Analyzers

High performance and reproducibility with accurate data

The Pyruvate Assay developed for the Cedex Bio and Cedex Bio HT Analyzer provides fast and accurate quantitative measurements. Pyruvate, in addition to glucose, is a source carbon and energy in mammalian cell culture and a common media supplement due to the ability to scavenge H_2O_2 . Glycolysis yields pyruvate as an intermediate metabolite which enters the TCA cycle, generating ATP. The assay principle is based on reduction of pyruvate to lactate by NADH, catalyzed by lactate dehydrogenase (LDH). The decrease of NADH is directly proportional to the pyruvate concentration and measured photometrically at 340 nm.



Trust results to make high confidence decisions

- Accurate results over a wide linear measuring range
- Extended range with automated on-board dilution

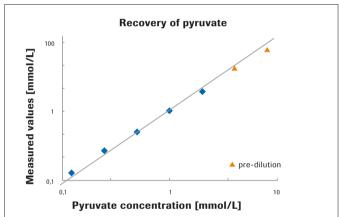


Figure 1: Pyruvate was spiked into RPMI cell culture medium and measured using the Cedex Bio HT Analyzer.*

Benefit from a wide and sensitive measuring range

	Pyruvate Bio	Pyruvate Bio HT
Range	0.2 - 8 mmol/L	0.1 - 8 mmol/L
	17.4 - 696 mg/L	8.7 - 696 mg/L
	up to 800 mmol/L, 69.6 g/L with automated on-board dilution	

Conserve sample with low volume requirement

• Sample volume of 6 μl per test



Rely on precise results Level 2 Level 1 Level 3 4.0 mmol/L 7.0 mmol/L Mean 0.52 mmol/L CV in-run 0.2 % 0.2 % 0.8 % **CV** inter-run 2.1 % 1.2 % 1.2 %

Precision was determined in samples of three concentration levels. Coefficients of variation (CV) were calculated for in-run precision (n=21) and inter-run precision (on 10 days). Representative performance data from Cedex Bio HT Analyzers are shown. Results obtained in individual laboratories may differ.

Save time with improved workflow efficiency

- Ready-to-use reagents
- Long on-board and calibration curve stability
- Barcoded reagents
- Pre- and post-dilution capability

	Pyruvate Bio	Pyruvate Bio HT
On-board stability	28 days	56 days
Calibration interval	56 days	56 days

Take control of your bioprocess with the Cedex portfolio

- Broad and expandable assay menu
- 2 instrument platforms with identical technology, menu and reagents to fit throughput and automation needs
- Solutions for development and manufacturing environments

Ordering information

Product	Pack size	Catalog number
Pyruvate Bio	4 x 50 tests	07 395 680 001
Pyruvate Bio HT	200 tests	07 299 818 001
Calibrator D Bio	6 x 1 ml	07 368 321 001
Control D Level 1 Bio	6 x 1 ml	07 368 178 001
Control D Level 2 Bio	6 x 1 ml	07 368 186 001
Control D Level 3 Bio	6 x 1 ml	07 368 194 001

Regulatory disclaimer

For use in quality control/manufacturing process only.

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