







Pyruvate Assay for Cedex Bio & 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 of carbon and energy in mammalian cell culture and a common media supplement due to the ability to eliminate $\rm H_2O_2$. Glycolysis yields pyruvate as an intermediate metabolite which enters the TCA cycle, generating ATP.

Process control based on fast and reliable analytics

- · Automated assay with highly reproducible results
- Wide measuring range, option for on-board dilution
- No sample filtration or other pretreatment required
- Low sample volume of 6 20 µL used

Assay principle

The assay 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.

Pyruvate + NADH +
$$H^+$$
 \xrightarrow{LDH} L-Lactate + NAD $^+$

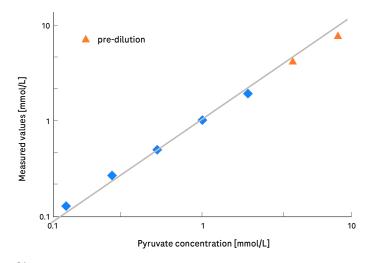
Benefit from a wide and sensitive measuring range

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

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



Recovery of pyruvate. Pyruvate was spiked into RPMI cell culture medium and measured using the Cedex Bio HT Analyzer. (Verification data of Roche Diagnostics)

Rely on precise results

	Level 1	Level 2	Level 3
Mean	0,52 mmol/L	4.0 mmol/L	7.0 mmol/L
CV in-run	0.8 %	0.2 %	0.2 %
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.

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.

Trademark

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Scan for ordering information for all Cedex Bio Analyzer and Cedex Bio HT Analyzer assays

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