

Formate Assay for Cedex Bio & Bio HT Analyzers

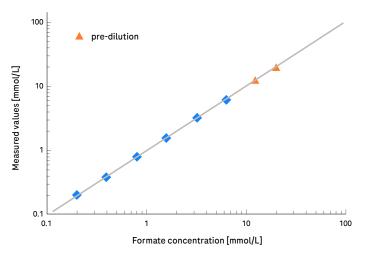
High performance and accuracy

The Formate Assay developed for the Cedex Bio and Cedex Bio HT Analyzers provides fast and accurate quantitative measurements in cell culture and fermentation media. Formate is a metabolic intermediate relevant in the fermentation of bacteria and yeast. The Assay principle is based on the oxidation of formate to bicarbonate by NAD in the presence of formate dehydrogenase (FDH). The increase of NADH is directly proportional to the formate concentration and measured photometrically at 340 nm.

Formate + NAD⁺ +
$$H_2O \xrightarrow{FDH}$$
 Bicarbonate + NADH + H^+

Trust results to make high confidence decisions

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



Roch

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Recovery of formate. Formate was spiked into RPMI cell culture medium and measured using the Cedex Bio HT Analyzer. (Verification data of Roche R&D)

Benefit from a wide and sensitive measuring range

Formate concentration

Range	0.2 - 20 mmol/L, 9 - 900 mg/L up to 2 mol/L,
	90 g/L with automated on-board dilution

Conserve sample with low volume requirement

• Sample volume of only 5 µl per test

Save time with improved workflow efficiency

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

	Formate Bio	Formate Bio HT
On-board stability	21 days	140 days
Calibration interval	84 days	140 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



	Level 1	Level 2	Level 3
Mean	1.0 mmol/L	8.0 mmol/L	15.0 mmol/L
CV in-run	0.8 %	0.3 %	0.4 %
CV inter-run	1.9 %	1.9 %	2.1%

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
Formate Bio	4 x 50 tests	07 705 590 001
Formate Bio HT	200 tests	07 705 603 001
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

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

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Published by Roche Diagnostics GmbH Sandhofer Str. 116 68305 Mannheim Germany

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