

TRACEABILITY and UNCERTAINTY



cobas c 501 / c 502 / c 503 / c 303 / c 311 / c 701 / c 702 – Ammonia/Ethanol/CO2 Calibrator

Cat. No. 20 751 995 190

Roche Diagnostics GmbH

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Routine Method Roche/cobas c systems	ACN	Reference Method	Reference Material	Selected Measurement Procedure	Calibrator Value	Uncertainty ¹	Unit
CO2-L Bicarbonate <i>kinetic liquid</i>	c 501/311: 156 c 502/701/702: 8156 c 503/303: 20440		Primary standard traceable to NIST		25.5	0.290	mmol/L
CO2-L Bicarbonate <i>kinetic liquid STAT</i>	c 501/311: 763 c 502/701/702: 8763		Primary standard traceable to NIST		25.5	0.290	mmol/L
ETOH2 Ethanol <i>enzymatic Gen. 2 serum, plasma</i>	c 501/311: 703 c 502/701/702: 8703 c 503/303: 20560		NIST Ethanol Standard Reference Material		46.9	0.523	mmol/L
ETOH2 Ethanol <i>enzymatic Gen. 2 STAT</i>	c 501/311: 671 c 502/701/702: 8671		NIST Ethanol Standard Reference Material		46.9	0.523	mmol/L
NH3L Ammonia <i>enzymatic</i>	c 501/311: 478 c 502/701/702: 8478		Primary reference material (ACS Ammonia Standard Material)		340	2.29	µmol/L
NH3L2 Ammonia <i>enzymatic</i>	c 501/311: 479 c 502/701/702: 8479 c 503/303: 20940		Primary reference material (ACS Ammonia Standard Material)		322	2.80	µmol/L

This uncertainty (expanded uncertainty; k = 2) was calculated in accordance with the "Guide to the expression of uncertainty in measurement" (GUM:1993). For the estimation of the single standard uncertainties normal distribution of the measurement results is assumed; the level of confidence of the expanded uncertainty is about 95% with the coverage factor k=2 (analogue to the 2sd of the standard uncertainty).