

QC 823

BLOOD GAS • ELECTROLYTE • METABOLITE • BUN CONTROL

INTENDED USE

RNA Medical® Brand **QC 823 Blood Gas • Electrolyte • Metabolite • BUN Control** is an assayed quality control material used for monitoring the performance of blood gas, electrolyte, metabolite, and BUN (urea) instrumentation. It may be used on any of the multiple test analyzers or individual blood gas, electrolyte, and metabolite testing systems listed on the back page. When paired with **QC 253 Full Range CO-Oximeter Control**, QC 823 is the ideal control for Radiometer 700 Series analyzers that measure total hemoglobin and hemoglobin fractions. It may also be used on ITC® IRMA TRUpoint® analyzers.

PRODUCT DESCRIPTION

QC 823 is a buffered aqueous solution containing electrolytes, glucose, lactate, and urea. It has been equilibrated with specific levels of oxygen, carbon dioxide, and nitrogen. This product contains no preservatives and no biological materials.

QC 823 is provided in convenient, ready-to-use ampuls containing 2.5 mL of solution. It is available in three (3) levels for monitoring pH, $p\text{CO}_2$, $p\text{O}_2$, Na^+ , K^+ , Cl^- , Ca^{++} , Mg^{++} , glucose, lactate, and BUN (urea) at varying points within the clinical range. Ampuls are packaged in single level boxes (30 ampuls of the same level) or multi-level boxes (10 ampuls of each level).

STORAGE AND SHELF LIFE

QC 823 has a shelf life of thirty-six (36) months from the date of manufacture when stored at 2-8 °C. It may be stored at room temperature (up to 25 °C) for nine (9) months, not exceeding the stated expiration date. This product should be protected from freezing and exposure to temperatures greater than 30 °C.

CONTROL VALUES AND ANALYTES

Lot specific values are provided with each box of controls. The typical values for QC 823 are as follows:

Analyte	Level 1	Level 2	Level 3
pH	7.15	7.40	7.56
$p\text{CO}_2$ (mmHg)	66	42	24
$p\text{O}_2$ (mmHg)	61	102	150
Na^+ (mmol/L)	114	134	160
K^+ (mmol/L)	2.0	4.4	6.2
Cl^- (mmol/L)	84	101	125
Ca^{++} (mmol/L)	1.50	1.10	0.50
Mg^{++} (mmol/L)	1.15	0.60	0.30
Glucose (mg/dL)	80	200	300
Lactate (mmol/L)	0.7	2.7	7.4
BUN (mg/dL)	9.5	27.5	47.5
Urea (mmol/L)	3.4	9.8	17.0

QC 823 SPECIFICATIONS

Packaging: 2.5 mL per ampul, 30 ampuls per box
Storage: 2-8 °C (up to 9 months at room temperature)
Shelf Life: 36 months from date of manufacture
Matrix: Buffered aqueous solution
Analytes: pH, $p\text{CO}_2$, $p\text{O}_2$, Na^+ , K^+ , Cl^- , Ca^{++} , Mg^{++} , glucose, lactate, and BUN (urea)

PEERQCSM STATISTICAL ANALYSIS

RNA has been providing peer statistics for over twenty years and, in 1999, was the first to introduce on-line data submission and reporting in real-time.

PeerQC is provided free of charge for use with RNA quality control products and features:

- Data submission and reporting via the RNA Medical website (www.RNAMedical.com)
- Real-time generation of monthly and peer comparison reports
- Patented error prevention technology to ensure peer group integrity
- Ability to add, edit, or print data submitted in prior months
- Automatic unit conversion for alternate unit submittals
- Web interface supporting multiple languages

ORDERING INFORMATION

RNA Medical can reserve a single lot of control for up to twelve (12) months. Pending availability and shelf life, additional sequestration may be possible. Automatic shipments may be arranged from a standing order on a predetermined frequency.

Please specify these catalog numbers when ordering RNA Medical QC 823 Controls.

Catalog number: **QC 823-1** (Level 1)
QC 823-2 (Level 2)
QC 823-3 (Level 3)
QC 823 (Multi-level)

ADDITIONAL PRODUCTS

RNA Medical offers a full line of blood gas controls, calibration verification materials, capillary blood collection tubes, and controls for various point-of-care tests (including rapid HIV kits). For further information about QC 823 or any other RNA Medical product, please call us or visit our website at www.RNAMedical.com.

RNA Medical is a registered trademark and PeerQC is a service mark of Bionostics, Inc., Devens, MA, USA. ITC and IRMA TRUpoint are registered trademarks of International Technidyne Corporation, Edison, NJ, USA. The products and services described herein are covered by one or more of the following U.S. Patents and their foreign counterparts: 7,027,931; 5,558,985; 5,320,965; 5,304,491; 5,045,529; 5,013,666; 4,945,062.

INSTRUMENT REFERENCE CHART

QC 823 Blood Gas • Electrolyte • Metabolite • BUN Control

QC 823

MANUFACTURER AND MODEL ANALYTES REPORTED BY INSTRUMENT IN QC 823

BAYER®

238	pH, pCO ₂ , pO ₂
248	pH, pCO ₂ , pO ₂
278, 280	pH, pCO ₂ , pO ₂
288	pH, pCO ₂ , pO ₂ , Na ⁺ , K ⁺ , Cl ⁻ , Ca ⁺⁺
840, 850, 860	pH, pCO ₂ , pO ₂ , Na ⁺ , K ⁺ , Cl ⁻ , Ca ⁺⁺ , Glucose, Lactate
614, 634, 644	pH, Na ⁺ , K ⁺ , Cl ⁻ , Ca ⁺⁺

IL

1304, 1306, 1312	pH, pCO ₂ , pO ₂
BG3	pH, pCO ₂ , pO ₂
BGE	pH, pCO ₂ , pO ₂ , Na ⁺ , K ⁺ , Cl ⁻ , Ca ⁺⁺
1610, 1620, 1630, 1640	pH, pCO ₂ , pO ₂ , Na ⁺ , K ⁺ , Ca ⁺⁺
Synthesis™ 10, 15, 20, 25, 30, 35	pH, pCO ₂ , pO ₂ , Na ⁺ , K ⁺ , Cl ⁻ , Ca ⁺⁺ , Glucose
Gem® Premier™	pH, pCO ₂ , pO ₂ , Na ⁺ , K ⁺ , Ca ⁺⁺

ITC

IRMA	pH, pCO ₂ , pO ₂ , Na ⁺ , K ⁺ , Cl ⁻ , Ca ⁺⁺ , Glucose, Lactate, BUN
------	--

MEDICA

EasyBloodGas	pH, pCO ₂ , pO ₂
EasyStat®	pH, pCO ₂ , pO ₂ , Na ⁺ , K ⁺ , Ca ⁺⁺

NOVA

Stat Profile® 1-10	pH, pCO ₂ , pO ₂ , Na ⁺ , K ⁺ , Cl ⁻ , Ca ⁺⁺ , Glucose, Lactate, BUN
Stat Profile Ultra	pH, pCO ₂ , pO ₂ , Na ⁺ , K ⁺ , Cl ⁻ , Ca ⁺⁺ , Mg ⁺⁺ , Glucose, Lactate, BUN
Nova 8	Na ⁺ , K ⁺ , Ca ⁺⁺ , Mg ⁺⁺

RADIOMETER

ABL® 3, 30	pH, pCO ₂ , pO ₂
ABL 300, 330	pH, pCO ₂ , pO ₂
ABL 4	pH, pCO ₂ , pO ₂ , K ⁺
ABL 5	pH, pCO ₂ , pO ₂
ABL 50, 500, 505, 510, 520	pH, pCO ₂ , pO ₂ , Na ⁺ , K ⁺ , Ca ⁺⁺
ABL 600, 605, 610, 615, 620, 625	pH, pCO ₂ , pO ₂ , Na ⁺ , K ⁺ , Cl ⁻ , Ca ⁺⁺ , Glucose, Lactate
ABL 700, 705, 710, 715, 720, 725	pH, pCO ₂ , pO ₂ , Na ⁺ , K ⁺ , Cl ⁻ , Ca ⁺⁺ , Glucose, Lactate
EML 100, 105	Na ⁺ , K ⁺ , Cl ⁻ , Ca ⁺⁺ , Glucose, Lactate
ICA	Ca ⁺⁺
KNA1	Na ⁺ , K ⁺
KNA2	Na ⁺ , K ⁺

ROCHE

AVL® 945, 947	pH, pCO ₂ , pO ₂
AVL 990, 995	pH, pCO ₂ , pO ₂
AVL Compact	pH, pCO ₂ , pO ₂
OMNI® 1-9	pH, pCO ₂ , pO ₂ , Na ⁺ , K ⁺ , Cl ⁻ , Ca ⁺⁺ , Glucose, Lactate

YSI®

2300 Stat Plus	Glucose, Lactate
----------------	------------------

Bayer is a registered trademark of Bayer AG, Leverkusen, Germany. Synthesis and Premier are trademarks and GEM is a registered trademark of Instrumentation Laboratory SPA, Milan, Italy. EasyStat is a registered trademark of Medica Corporation, Bedford, MA, USA. Stat Profile is a registered trademark of Nova Biomedical Corporation, Waltham, MA, USA. ABL is a registered trademark of Radiometer A/S Corporation, Copenhagen, Denmark. AVL is a registered trademark of AVL GMBH, Graz, Austria. Roche OMNI is a registered trademark of Roche Diagnostics GmbH, Mannheim, Germany. YSI is a registered trademark of YSI Incorporated, Yellow Springs, OH, USA.

BIOMKT-0015, Rev. B



RNA Medical, Division of Bionostics, Inc. • 7 Jackson Road • Devens, MA 01434
(800)533-6162 • (978)772-9070 • Fax (978)772-9071 www.RNAMedical.com