

QC 253

FULL RANGE CO-OXIMETER CONTROL

INTENDED USE

RNA Medical® Brand QC 253 *Full Range CO-Oximeter Control* is an assayed quality control material used for monitoring the measurements of total hemoglobin and hemoglobin fractions on CO-Oximeter instrumentation. QC 253 provides an alternative for those needing a control that parallels the human physiologic range for tHb, O₂Hb, and COHb. It may be used on stand-alone CO-Oximeters or any of the blood gas testing systems measuring total hemoglobin and hemoglobin fractions listed on the back page.

PRODUCT DESCRIPTION

QC 253 is a purified bovine hemoglobin solution that has been treated with compressed air and precise concentrations of carbon monoxide. This control contains no preservatives and no human-based materials. It is considered good laboratory practice to follow the recommended "Universal Precautions" when handling any blood product.

QC 253 is provided in convenient, ready-to-use ampuls containing 1.2 mL of solution. It is available in three (3) levels of total hemoglobin, oxyhemoglobin, and carboxyhemoglobin for monitoring CO-Oximeter performance at varying points within the clinical range; it also contains methemoglobin. 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 253 has a shelf life of eighteen (18) months from the date of manufacture when stored at 2-8 °C. This product should be protected from freezing and exposure to temperatures greater than 8 °C.

CONTROL VALUES AND ANALYTES

Lot specific values are provided with each box of controls. The typical values for QC 253 are as follows:

Analyte	Level 1	Level 2	Level 3
tHb (g/dL)	8.0	13.5	17.0
O ₂ Hb (%)	93.0	77.5	52.0
COHb (%)	6.0	20.0	49.0
MetHb (%)	0.5	0.5	0.5
Vol O ₂ (%)	10.9	15.1	13.2
O ₂ Ct (mL/dL)	11.4	15.6	14.2
RHb or HHb (%)	0.0	0.0	0.0

QC 253 SPECIFICATIONS

Packaging: 1.2 mL per ampul, 30 ampuls per box

Storage: 2-8 °C

Shelf Life: 18 months from date of manufacture

Matrix: Bovine hemoglobin solution

Analytes: tHb, O₂Hb, COHb, MetHb, Vol O₂ (O₂Ct), and RHB (HHb)

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 253 Controls.

Catalog number: QC 253-1 (Level 1)
QC 253-2 (Level 2)
QC 253-3 (Level 3)
QC 253 (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 253 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. The products and services described herein are covered by U.S. Patent 7,027,931.

INSTRUMENT REFERENCE CHART

QC 253 Full Range CO-Oximeter Control

QC 253

MANUFACTURER AND MODEL ANALYTES REPORTED BY INSTRUMENT IN QC 253

IL

482	tHb, O ₂ Hb, COHb, MetHb, Vol O ₂ , RHb
682	tHb, O ₂ Hb, COHb, MetHb, Vol O ₂ , RHb
Synthesis™ 15, 25	tHb, O ₂ Hb, COHb, MetHb
GEM OPL®	tHb, O ₂ Hb, COHb, MetHb

ITC®

AVOXimeter® 1000E	tHb, O ₂ Hb
AVOXimeter 4000	tHb, O ₂ Hb, COHb, MetHb

RADIOMETER

OSM®3	tHb, HbO ₂ Sat (sO ₂), HbO ₂ , HbCO, MetHb, O ₂ Ct
ABL 510, 520	tHb, HbO ₂ , HbCO, MetHb
ABL 610, 615, 620, 625	tHb, HbO ₂ , HbCO, MetHb
ABL 710, 715, 720, 725	tHb, HbO ₂ , HbCO, MetHb
ABL 810, 815, 820, 825	tHb, HbO ₂ , HbCO, MetHb

ROCHE

OMNI® 2, 3, 5, 6, 8, 9	tHb, COHb, MetHb, O ₂ Hb, RHb (HHb)
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SIEMENS® (BAYER®)

845, 855, 865	tHb, O ₂ Hb, COHb, MetHb, HHb
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