

thermoscientific



Endurance. Precision. Excellence.

B·R·A·H·M·S KRYPTOR GOLD – A new level of performance from a benchtop immunoassay analyzer



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ThermoFisher
SCIENTIFIC

The Journey of Excellence Continues

The novel engineering and thoughtful design of B·R·A·H·M·S KRYPTOR GOLD redefines user autonomy, throughput, and cost efficiency

1997



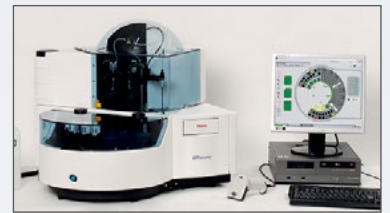
B·R·A·H·M·S KRYPTOR

2007



B·R·A·H·M·S KRYPTOR compact

2010



B·R·A·H·M·S KRYPTOR compact PLUS



1 The **new carousel** features a sample rack that receives up to **80 samples** at any time without interrupting ongoing measurements, and a cooled inner ring that holds **16 reagent kit boxes** at optimal temperature

2 **Compact body** with integrated monitor minimizes footprint. **Smooth contours** safeguards workspace from contamination by preventing objects from being placed on the instrument

3 Enhanced **carousel speed** boosts throughput

4 The **new stack holder magazine** receives 10 reaction plates of 120 wells each. Plates are processed in overlapping run cycles to reduce overall processing time and can run up to 600 tests during one shift without intervention

5 The **robust touchscreen** can be positioned to the left or right of the instrument to optimally fit lab space and traffic

6 When processing is interrupted, a **tower light** signals for attention

With enhanced capacity, endurance and speed, Thermo Scientific™ B·R·A·H·M·S™ KRYPTOR™ GOLD can perform up to 115 tests in one hour, while you take care of other duties



A Natural User Experience

Seamless interaction with B·R·A·H·M·S KRYPTOR GOLD guides calibration, processing and sample tracking regardless of user experience

Intuitive interaction

- Simple, easy-to-understand icons on the main screen control all essential processes and simplify navigation

Purposeful visualization

- Color-coded (“traffic light system”) diagram of instrument carousel communicates real-time run status and any necessary actions
- Calibration and standard curves, as well as quality control results, are summarized graphically for efficient evaluation

Transparent logistics

- Status window on main screen clearly displays run status, reagent expiry date, upcoming maintenance, and specimen processing stage
- Live lists of results and work to be done ensure processing clarity and allow entering new measurement requests at any time





Workflow reliability

- Predominantly automated, software- controlled maintenance management
- Tower light and monitor signal for attention to safeguard samples and work

Traceable accuracy

- Barcodes as well as images of reagents and consumables facilitate data entry and registration, whilst minimizing errors and saving time

Smart communication

- Secure bidirectional and universal interface (RS232) to laboratory information systems (LIS) and prenatal screening risk calculation software

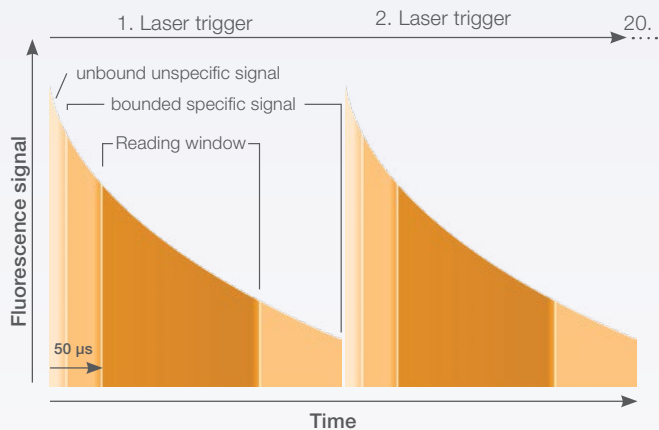
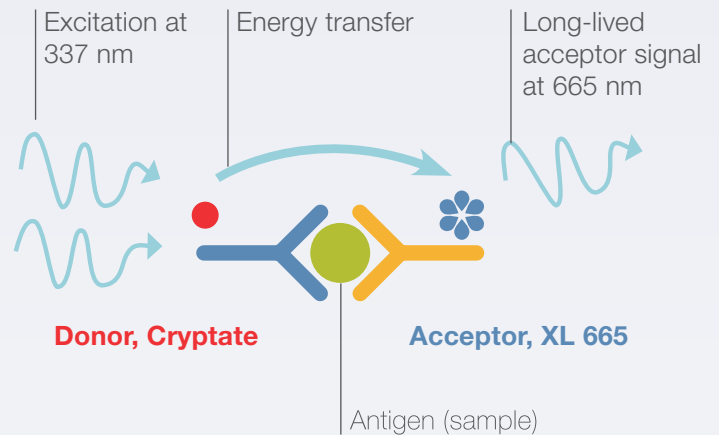
The smart touchscreen features a streamlined intuitive graphical interface

Powered by Nobel Prize[®]-winning TRACE[™] technology

The unique measurement principle at the heart of our expertise in highly sensitive and specific diagnostics

Formation of an immunocomplex prolongs a measurable signal

Europium cryptate will donate energy to nearby fluorophores, which lengthens their emission well beyond unaided signals. In TRACE (Time-Resolved Amplified Cryptate Emission), cryptate and fluorophore are bound to antibodies that build an immunocomplex around the target analyte, bringing the two molecules close enough for energy donation.



TRACE simplifies assay processing and ensures that only signals of interest are detected and measured

Signal detection is delayed by 50 μs to isolate the long signal emitted by immunocomplexes from short signals of unbound fluorophores. This long-lived signal is proportional to the concentration of the analyte of interest.



Exceptional intra- and inter-assay precision, in relation to respective parameter information and extraordinary accurate results.

The outstanding precision and result stability of our prenatal screening assays for example has been confirmed by an independent Quality Assessment Service (QAS) since 2003 with an mean CV (coefficient of variation) of 3.1%



Fast results

Without wash or separation steps, TRACE-based assays facilitate short incubation times to boost overall testing throughput



Intelligent dilution

Timely recognition and automated dilution of specimens where target concentrations are outside the direct measuring range



Highest reliability

Automatic calculation of specific to unspecific signal ratio accounts for confounding factors, such as variation in sample color and turbidity

Biotin independent technology and assay design



The B·R·A·H·M·S KRYPTOR assay portfolio

Cutting-edge research and biomarker development that keep pace with the information needs of modern healthcare

Procalcitonin (PCT) – the best in sepsis diagnosis

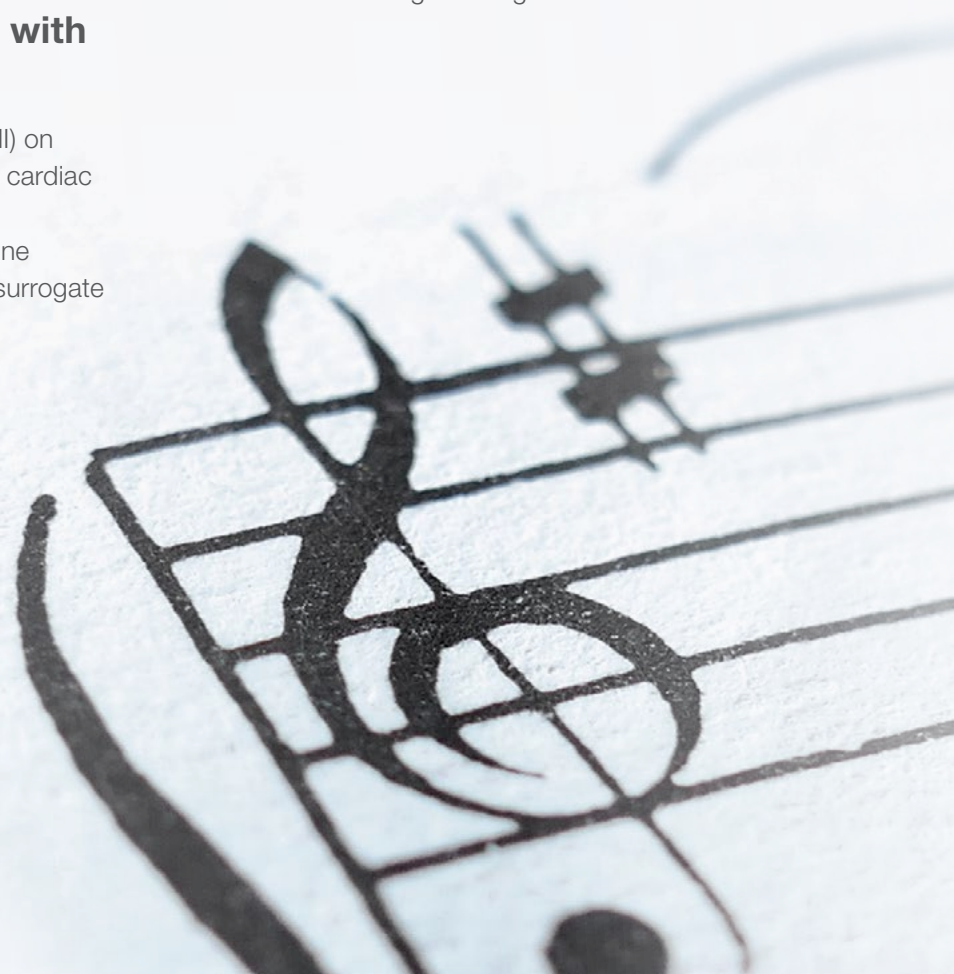
- Early detection of clinically relevant bacterial infection
- PCT-based decision algorithm facilitates:
 - significantly reduced antibiotic exposure
 - decreased length of stay in the intensive care unit

Improve your clinical practice with Copeptin proAVP

- Exclusion of Acute Myocardial Infarction (AMI) on admission combining Copeptin proAVP with cardiac Troponin
- Optimize the differential diagnosis of endocrine disorders with Copeptin proAVP, the stable surrogate marker of Vasopressin (AVP/ADH)

Superior risk stratification with MR-proADM

- Early identification of microcirculatory damage and organ dysfunction
- Identifies patients at a high risk of adverse complications
- Safely increases out-patient management through enhanced discharge management





Prenatal screening markers on B·R·A·H·M·S KRYPTOR instruments – the gold standard

- Complete portfolio for 1st trimester screening for fetal trisomies and maternal pre-eclampsia as well as pre-eclampsia diagnosis >20 weeks of gestation
- Excellent long term precision and lot-to-lot stability of the biomarkers Free β hCG and PAPP-A
- In routine use by Fetal Medicine Foundation since 1999

Proven quality in thyroid diagnostics

- TRAK human – the gold standard in the diagnosis, prognosis and follow-up of Graves' disease
- Highly sensitive Thyroglobulin assay with minimal assay interferences and detection of all possible interferences for reliable follow-up in thyroid cancer patients
- anti-Tg_n and anti-TPO_n with native assay components for improved clinical sensitivity and specificity

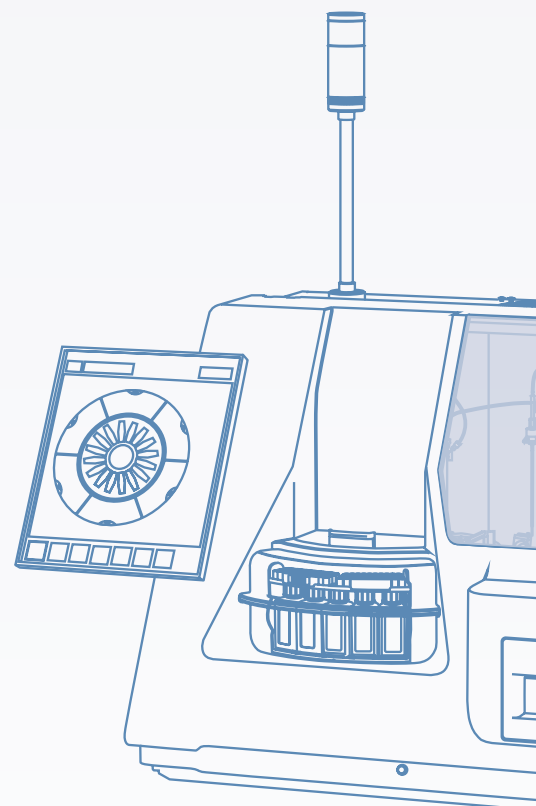
Confident follow-up of cancer patients

- Excellent precision for optimal patients follow-up by serial tumor marker determination
- The first and only fully automated Chromogranin A assay

Outstanding precision is the hallmark of B·R·A·H·M·S KRYPTOR instruments performance

Technical specifications

| | |
|--|--|
| Operating modes | Random access, batch, emergency (STAT) |
| Instrument consumables | Solutions 1-4, Dilution Plates, Reaction Plates, Plate Waste Bins, Buffer |
| Dimensions | 93 cm x 73 cm (121 cm with tower light or with open hood) x 72 cm (W x H x D) |
| Weight | 118 kg |
| Noise | The A-weighted equivalent continuous sound pressure level at operator's position: LAeq 66,1 dB |
| Electric power consumption | 650W |
| Sample capacity | Up to 80 samples divided in 5 sample racks a 16 samples |
| Sample test tubes | Primary and secondary test tubes, diameter 11 - 17 mm, variable from sample to sample special adapter for micro test tubes |
| Sample identification | Barcode recognition and manual entry |
| Sample check-up | Liquid-level monitoring, clot recognition |
| Sample volume | 8 - 70 μ L (test specific) |
| Reagent capacity | Up to 16 different or identical kit boxes |
| Reagent identification | Barcode reader and manual entry |
| Reagent check-up | Liquid-level monitoring, expiry date, number of remaining tests, status of calibration |
| Calibration | Reference curve shipped with reagents, calibration every 1 - 2 weeks, 1- and 2-point calibration (test specific); Exception TRAK assay: calibration valid for 5 days (1 or 2 levels, double determination) |
| Sample and reagent distribution | 1 x heated, teflon-coated steel needle; automatic wash step between different tests |
| Reaction range | 37 - 40 °C, temperature monitored |
| Reaction medium | Specific reaction plate with 120 wells |
| Signal generation | Nitrogen laser, 120 μ J/pulse, 20 Hz, emission at 337 nm |
| Incubation time | Between 9 and 59 minutes (test specific) |
| Throughput | Up to 115 tests per hour; 600 tests w/o interaction in 8 hours (test specific) |
| Online connection | LIS interface; interface to prenatal screening risk calculation software products |
| Quality control | Comprehensive QC software package (content depends on software version); control-area entry via barcode |
| Maintenance | Daily, weekly, monthly (predominantly automated and software-controlled) |



Test menu & ordering information

The following parameters are available on **B·R·A·H·M·S KRYPTOR GOLD**:

| Indication | B·R·A·H·M·S KRYPTOR GOLD test | Kit size | Ref. |
|--|--|-----------|---------|
| Infectious disease | B·R·A·H·M·S PCT sensitive KRYPTOR (Procalcitonin) | 50 tests | 825.050 |
| Respiratory/ Pulmonary/ Cardiovascular diseases | B·R·A·H·M·S Copeptin proAVP KRYPTOR (Copeptin – C-terminal pro Arginine Vasopressin) | 50 tests | 857.050 |
| | B·R·A·H·M·S MR-proADM KRYPTOR (Midregional Pro-Adrenomedullin) | 50 tests | 829.050 |
| Endocrinology and Metabolic disorders | B·R·A·H·M·S anti-Tgn KRYPTOR (Auto-antibodies to Thyroglobulin) | 75 tests | 830.075 |
| | B·R·A·H·M·S anti-TPOn KRYPTOR (Auto-antibodies to Thyroperoxidase) | 75 tests | 852.075 |
| | B·R·A·H·M·S hTg KRYPTOR (with Recovery, Human Thyroglobulin) | 75 tests | 833.075 |
| | B·R·A·H·M·S hTg sensitive KRYPTOR (with Recovery, Human Thyroglobulin sensitive) | 75 tests | 832.075 |
| | B·R·A·H·M·S TRAK human KRYPTOR (Auto-antibodies to human Thyrotropin (TSH) Receptor) | 50 tests | 801.050 |
| | B·R·A·H·M·S Copeptin proAVP KRYPTOR (Copeptin – C-terminal pro Arginine Vasopressin) | 50 tests | 857.050 |
| Prenatal Screening and Fertility | B·R·A·H·M·S AFP KRYPTOR (Alpha-Fetoprotein) | 75 tests | 816.075 |
| | B·R·A·H·M·S Free β hCG KRYPTOR (Beta-subunit of human chorionic Gonadotropin) | 75 tests | 809.075 |
| | B·R·A·H·M·S hCG+ β KRYPTOR (Human chorionic Gonadotropin including beta subunit) | 50 tests | 841.050 |
| | B·R·A·H·M·S PAPP-A KRYPTOR (Pregnancy-associated Plasma Protein A) | 75 tests | 866.075 |
| | B·R·A·H·M·S PIGF plus KRYPTOR (Placental growth Factor) | 75 tests | 859.075 |
| | B·R·A·H·M·S sFlt-1 KRYPTOR (Soluble fms-like Tyrosine Kinase 1) | 75 tests | 845.075 |
| B·R·A·H·M·S uE3 KRYPTOR (Unconjugated Estriol) | 75 tests | 803.075 | |
| Cancer diseases | B·R·A·H·M·S AFP KRYPTOR (Alpha-Fetoprotein) | 75 tests | 816.075 |
| | B·R·A·H·M·S CA 15-3 KRYPTOR (Cancer Antigen 15-3) | 75 tests | 808.075 |
| | B·R·A·H·M·S CA 19-9 KRYPTOR (Cancer Antigen 19-9) | 100 tests | 807.100 |
| | B·R·A·H·M·S CA 125 II KRYPTOR (Cancer Antigen 125) | 75 tests | 805.075 |
| | B·R·A·H·M·S CEA KRYPTOR (Carcinoembryonic Antigen) | 100 tests | 817.100 |
| | B·R·A·H·M·S CgA II KRYPTOR (Chromogranin A) | 50 tests | 839.050 |
| | B·R·A·H·M·S CYFRA 21-1 KRYPTOR (Fragment of Cytokeratin-19) | 50 tests | 811.050 |
| | B·R·A·H·M·S hCG+ β KRYPTOR (Human chorionic Gonadotropin including beta subunit) | 50 tests | 841.050 |
| | B·R·A·H·M·S NSE KRYPTOR (Neuron-specific Enolase) | 50 tests | 821.050 |
| | B·R·A·H·M·S Prolactin KRYPTOR (Prolactin) | 50 tests | 824.050 |
| | B·R·A·H·M·S SCC KRYPTOR (Squamous cell Carcinoma Antigen) | 50 tests | 812.050 |
| | B·R·A·H·M·S hTg sensitive KRYPTOR (with Recovery, Human Thyroglobulin sensitive) | 75 tests | 832.075 |
| | B·R·A·H·M·S Total PSA KRYPTOR (Prostate-specific Antigen total) | 100 tests | 810.100 |
| | B·R·A·H·M·S Free PSA KRYPTOR (Prostate-specific Antigen free) | 50 tests | 867.050 |
| | B·R·A·H·M·S Osteocalcin KRYPTOR (Osteocalcin) | 50 tests | 835.050 |



Note: Parameters available according to technical availability and registration status in the countries

Ordering Information

| Instrument & consumables | Kit content | Reference |
|--|--|------------|
| B·R·A·H·M·S KRYPTOR GOLD | - | BMKSYS0201 |
| B·R·A·H·M·S Solution 1 KRYPTOR GOLD | 3 x 100 ml | 89991 |
| B·R·A·H·M·S Solution 2 KRYPTOR GOLD | 3 x 100 ml | 89992 |
| B·R·A·H·M·S Solution 3 KRYPTOR GOLD | 3 x 50 ml | 89993 |
| B·R·A·H·M·S Solution 4 KRYPTOR GOLD | 3 x 100 ml | 89994 |
| B·R·A·H·M·S Dilution Plates KRYPTOR GOLD | 5 plates (42 wells/plate) | 89995 |
| B·R·A·H·M·S Reaction Plates KRYPTOR GOLD | 30 plates (120 wells/plate) + 4 waste bins | 89996 |
| B·R·A·H·M·S KRYPTOR BUFFER | 5 x 65 g | 89970 |



Clinical Diagnostics

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