

thermo scientific



Endurance. Precision. Excellence.

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

ThermoFisher
S C I E N T I F I C

The Journey of Excellence Continues

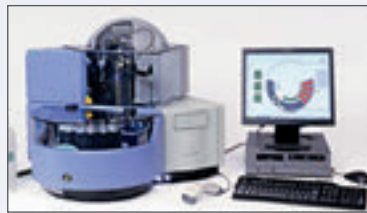
The novel engineering and thoughtful design of B·R·A·H·M·S KRYPTOR GOLD redefines user autonomy, throughput, and cost efficiency

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 slash overall processing time and can run up to 600 samples 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 things



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

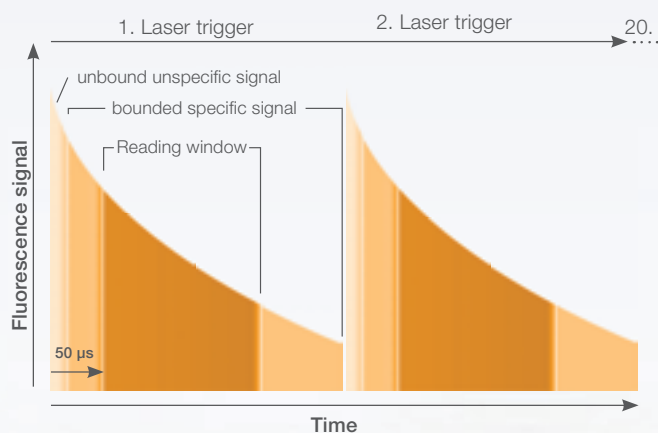
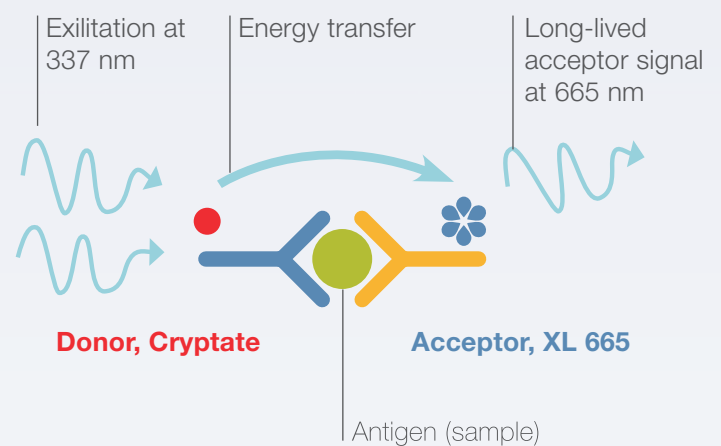
The smart touchscreen features a streamlined intuitive graphical interface

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 μ s 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 KRYPTOR biomarker portfolio

Setting new standards in innovative, industry-leading diagnostics for timely and informed healthcare

KRYPTOR not only stands for uncompromising quality in instrumentation, but also for 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 KRYPTOR – 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

Outstanding precision is the hallmark of KRYPTOR performance

Proven quality in thyroid diagnostics

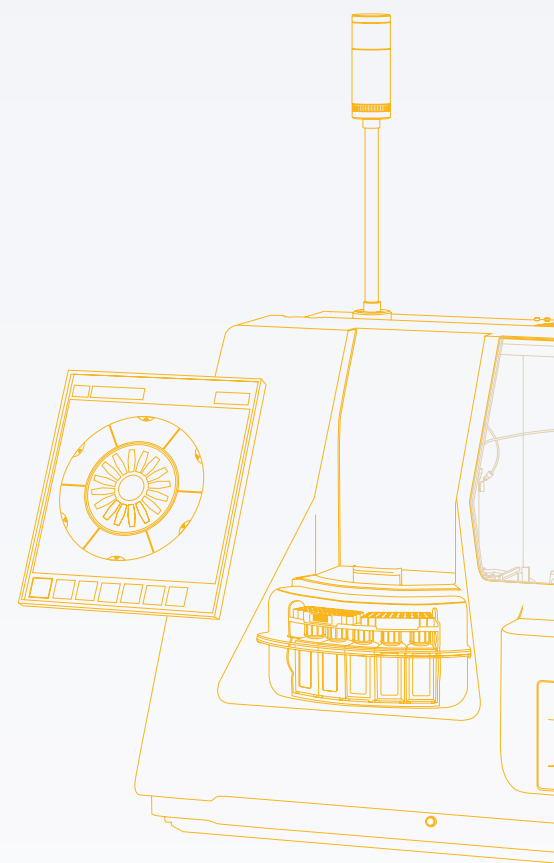
- TRAK human – the gold standard in the diagnosis, prognosis and follow-up of Graves' disease
- Highly sensitive Thyroglobulin assay with minimal assay interferences and detection of all possible interferences for reliable follow-up in thyroid cancer patients
- anti-Tg_n and anti-TPO_n with native assay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

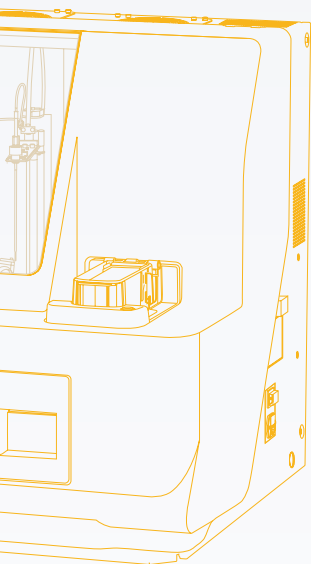
Technical specifications

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 µL (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 µJ/pulse, 20 Hz, emission at 337 nm
Incubation time	Between 9 and 59 minutes (test specific)
Throughput	Up to 115 tests per hour; 600 samples 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

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



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	89.991
B·R·A·H·M·S Solution 2 KRYPTOR GOLD	3 x 100 ml	89.992
B·R·A·H·M·S Solution 3 KRYPTOR GOLD	3 x 50 ml	89.993
B·R·A·H·M·S Solution 4 KRYPTOR GOLD	3 x 100 ml	89.994
B·R·A·H·M·S Dilution Plates KRYPTOR GOLD	5 plates (42 wells/plate)	89.995
B·R·A·H·M·S Reaction Plates KRYPTOR GOLD	30 plates (120 wells/plate) + 4 waste bins	89.996
B·R·A·H·M·S KRYPTOR BUFFER	5 x 65 g	89.970



Product is currently under verification and validation and will be available dependent from registration status in the countries. Conformity assessment according EEC 98/79/EEC is in preparation. For more information refer to Instruction for Use! Not for United States!

Clinical Diagnostics

Thermo Fisher Scientific
B·R·A·H·M·S GmbH
Neuendorfstr. 25
16761 Hennigsdorf
Deutschland

+49 (0)3302 883 0
+49 (0)3302 883 100 Fax
info.endo@thermofisher.com
www.thermoscientific.com/brahms

Find out more at thermoscientific.com/kryptor

©2018 Thermo Fisher Scientific Inc. All rights reserved.

All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified. Nobel Prize® is a registered trademark of the Nobel Foundation. KRYPTOR and TRACE are registered trademarks of CIS bio international, all licensed for use by B·R·A·H·M·S, a part of Thermo Fisher Scientific.

Thermo Fisher Scientific products are distributed worldwide; not all intended uses and applications mentioned in this printing are registered in every country.