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bCUBE®2 starter kit

From raw material to final result



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WARNING AND PRECAUTIONS

Please check Kits integrity before use. Use of deteriorated Kits may cause lack of results and/or equivocal results. Do not mix the components of kits with different batch number. Do not interchange reagents with other kits, or components from different lots. Do not use reagents after their expiration date. This kit is designed to be used by personnel trained to follow correct molecular biology precautions.

WARRANTY AND RESPONSIBILITIES

Hyris Ltd guarantees the buyer exclusively concerning the quality of reagents and of the components used to produce the Kits. Any product not fulfilling the specifications included in the product sheet will be replaced. This warranty limits our responsibility to the replacement of the product. No other warranties, of any kind, express or implied, including, without limitation, implicit warranties of commercialisation ability or adequacy for a given purpose, are provided by Hyris Ltd. Hyris Ltd is not responsible and cannot anyway be considered responsible or jointly responsible for possible direct and indirect damages resulting from the utilization of the Kits by the user. The user consciously and under his/her own responsibilities decides for the utilization purposes of the Kits and uses it the way he/she considers most suitable in order to reach his/her goals and/or objectives. Hyris Ltd will not be held responsible for any direct, indirect, consequential or incidental damage resulting of the use, misuses, results of the use or inability to use any product. Some of the applications which may be performed with this product may be covered by applicable patents in certain countries. The purchase of this product does not include or provide a license to perform patented applications. Users may be required to obtain a license depending on the country and/or application. Hyris Ltd does not encourage the unlicensed use of patented applications.

The Kits may require the use of Taq Polymerase enzyme, DNA binding components and fluorochromes/quencher, often registered as trademark by companies. TaqMan® is a trademark of Roche Molecular Systems, Inc. FAM™, VIC®, HEX™ and ROX™ are a trademark of Thermo Fisher Scientific or its subsidiaries. SYBR is a registered trademark of Molecular Probes, Inc. (Thermo Fisher Scientific). MGB probes are a trademark of Elitech group. The Kits have been internally tested by our quality control. Any responsibility is waived if the warranty of quality control does not refer to the specific Kits. The user is personally responsible for data that he/she will obtain and/or he/she will supply to third parties using these kits. Once the sealed package is opened the user accepts all the conditions without fail; if the package is still sealed the kit can be returned and the user can be refunded. Kits components are intended, developed, designed, and sold for Research Purpose Only. Product claims are subject to change. Therefore, please refer to our website (www.hyris.net) for the most up-to-date information on Hyris Ltd products.

bCUBE®2 starter kit

The starter kit includes one bCUBE 2.0 unit plus all the reagents, disposable and additional equipment for easy and fast DNA/RNA analysis through Real-Time PCR, from raw material to final result, with all the support and training.

Get easy your sample homogenization

- Vortex, disposable beads and micro-pestles for homogenization of your raw material will be provided.
- According to the nature of your sample, Hyris will suggest you the more suitable method.
- Moreover, Hyris will provide you with a full training and technical support for the correct and reliable manipulation of your raw material.


High performance and portability with compact lab equipment

- High-performance and compact minicentrifuge and thermal block for portable, easy, and reliable nucleic acid purification for subsequent analysis in Real-Time PCR will be provided.
- Due to the reduced dimensions and weight of the equipment included in the starter kit, you'll be able to perform your job in the field with the same performance as a traditional analysis laboratory.


Specific reagents for sample preparation

- According to samples nature and subsequent analysis, a specific sample prep kit will be available.
- The kit will include all the necessary reagents and disposables for the specific preparation of your sample.
- The sample prep kit will allow you to prepare your sample for subsequent analysis in Real-Time PCR.


Specific reagents for sample analysis in Real-Time PCR

- According to the Real-Time PCR analysis you are interested in, a specific bKIT will be available.
- The bKIT will allow you to perform the specific amplification of the target of your interest in Real-Time PCR
- The bKIT contains all the reagents and instruction manual to perform the analysis correctly and reliably.
- The bKITs are specifically developed to be used on the bCUBE® device, but can be used also on a traditional laboratory thermal cycler.



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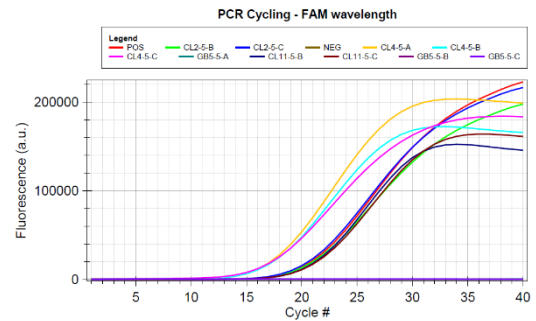
bCUBE®

- One bCUBE 2.0 unit is provided with the starter kit
- Portable, fast DNA/RNA amplification and detection
- Robust, Compact, Lightweight for “in the field” operation
- High precision thermal control
- Performing Isothermal Amplification, Real Time PCR and Melting Curves
- Simultaneous multi wavelength detection
- Enhanced connectivity: WiFi, Ethernet, Bluetooth
- bDATA® service features cloud storage as well as remote control and monitoring



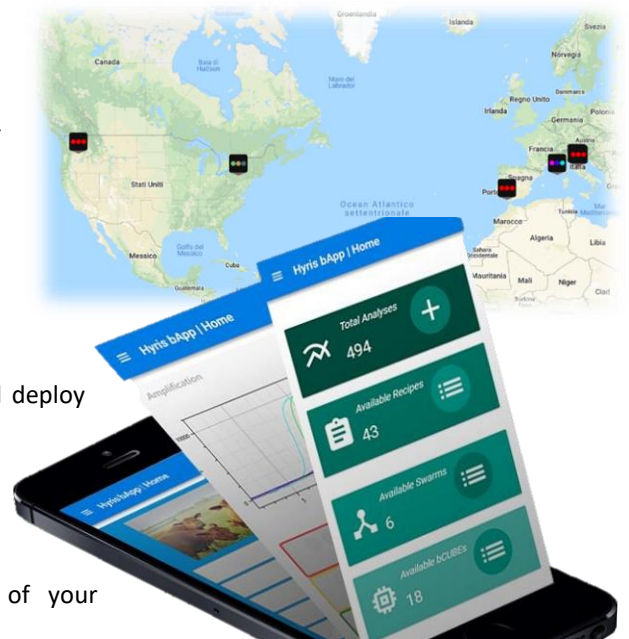
Real Time DNA/RNA amplification and detection

- Detection in less than 15 minutes for Isothermal amplification
- Automatic results interpretation
- Auto-adaptive thermal control that sweeps from very fast (thermal cycling) to very slow ramps (melting curves)
- High speed detection enables high resolution melting curves (sampling < 0.05°C)
- Wireless and wired connectivity for maximum flexibility



Get Connected with bAPP

- Smart analysis portability with Hyris bAPP
- Wireless bCUBE® control enables “in the field” bio-molecular detection
- Link each sample with photographs and GPS tags
- Start your analysis with a few touches, no need to be an expert
- Watch the detection progress in Real-Time
- Compatible with Smartphones, Tablets, PCs/Notebooks
- Runs on all Operating Systems: Windows, Linux, MacOS/iOS, Android
- Share your analyses worldwide with bDATA® cloud service
- Organize your bCUBEs in Swarms, and deploy them wherever you need
- Analyse your data, using filters and statistical tools
- Monitor and control your bCUBEs remotely
- Check the status and the position of your machines on a map



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bCUBE®
Technical Specs

Dimensions	100 x 100 x 120 mm
Weight	1.15 kg
User Interface	bAPP (Multi-Platform) / bPANEL (Windows PC)
Communication Interfaces	WiFi, Ethernet, Bluetooth
Sample number	16 samples on standard cartridge, up to 49 on custom cartridges
Sample volume	10 to 30 µl (16 wells cartridge) *
Light source	High brightness LEDs – 2 wavelengths
Excitation wavelengths	472 and 530 nm **
Optical Detection	High resolution, low noise CMOS Camera (5MP)
Acquisition time	< 1s – Total time for all samples
Detected wavelengths	572 nm and 524 nm **
Thermal Block	Peltier module for heating and cooling
Temperature sensor	High precision NTC resistor
Temperature resolution	< 0.05 °C
Temperature uniformity	± 0.1 °C
Temperature control range	20 – 99 °C
Temperature ramp	Up to 1.5 °C/s
Power supply	12 V – DC
Power consumption	Max 60W

* Actual sample volume required may depend on the specific analytical kit.

** Custom optical design possible upon request, up to four wavelengths capability.