

**Reliable Results
at a Glance!**



On basis of the innovative **HyBeacon Technology** we offer you a wide range of human genetic, microbiological and viral assays.

Your Benefits

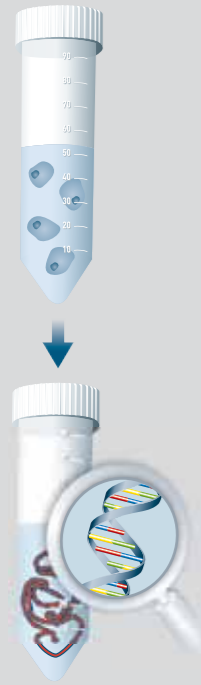
- **Reliable Diagnostics from one Source:** From nucleic acid extraction to result, we offer you all the necessary components for your routine laboratory testing.
- **Innovative:** The **HyBeacon Technology** provides fast and reliable results for efficient diagnostics in your laboratory.
- **Maximum of Automation:** The combination of fully automated nucleic acids extraction and subsequent amplification with fluorescence based detection in the **FluoroCycler®** saves time-consuming hands on time.
- **Reliable Results at one Glance:** The test specific evaluation software of the **FluoroCycler®** displays the results clearly, providing a guaranteed convenient result interpretation.
- **High Sensitivity and Specificity:** All test systems ensure high sensitivity and specificity.
- **User-friendly:** The easy to perform technique enables optimal integration in your daily lab routine.
- **CE-labeled from Isolation to Result:** No need for elaborate validation studies.

Our HyBeacon Technology – Simple, fast and reliable

The innovative technology with fluorescence labeled probes for reliable and fast results. This is how it works: DNA or RNA is extracted from a specimen with the **GenoXtract**. After amplification in **FluoroCycler®** the detection takes place in the same device, where the fluorescence labeled **HyBeacon** probes hybridize to the amplicon. The result is displayed as melting curve analysis. This ensures easy and fast results for your efficient lab routine.



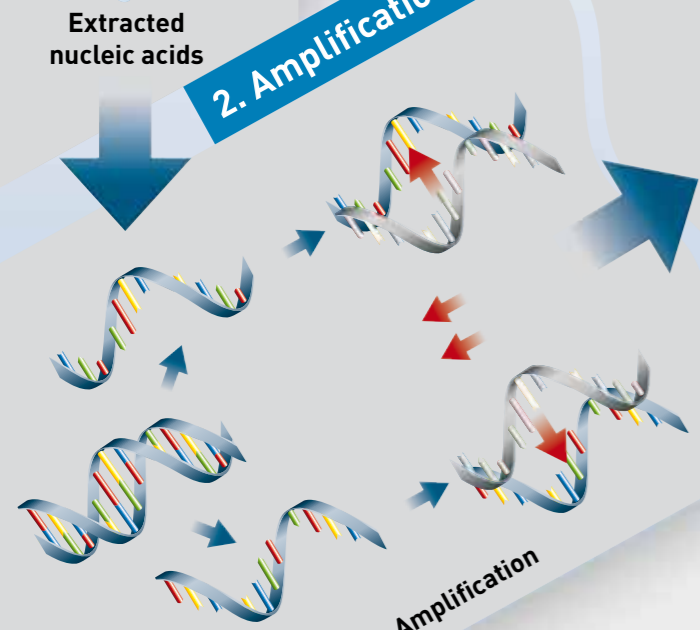
1. Extraction of Nucleic Acids



GenoXtract – Fully Automated Extraction of Nucleic Acids

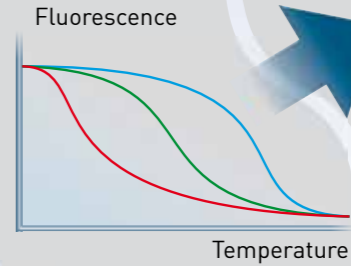
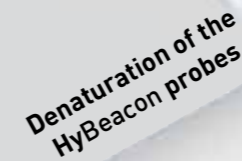
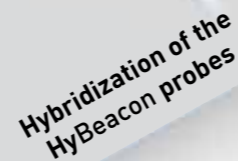
Starting point of each analysis is nucleic acid (DNA or RNA) extracted from sample material. **GenoXtract** and the extraction kits therefore ensure a fully automated extraction. The isolated nucleic acid can directly be applied for further testing.

2. Amplification and Detection in the FluoroCycler®



Amplification – Selective Duplication of Nucleic Acids

The extracted nucleic acid is selectively amplified in a subsequent amplification reaction.



Your result

Evaluation and Presentation of Results – Reliable Results at a Glance

The decrease of fluorescence is measured in the **FluoroCycler®** and displayed as a melting curve. The test specific software evaluates the melting curve and displays the results – at one glance. This ensures convenient interpretation of the results.

Your Benefit:

The combination of specific amplification and subsequent detection in the same device guarantees high diagnostic reliability. The clearly arranged presentation of results ensures efficient diagnostics and saves valuable technician time.

HyBeacon Probes – Detection via Fluorescence Labeling

HyBeacon probes are single-stranded fluorescence labeled probes complementary to the amplified nucleic acid. In unbound condition of the **HyBeacon** probes, the fluorophore can not emit fluorescence. After hybridization with the amplicon, excitation and measurement of fluorescence is possible. During the subsequent melting curve analysis the **HyBeacon** probes and the amplicon separate at a specific temperature. This leads to single-stranded probes and immediately to a decrease of fluorescence.



Our Portfolio

FluoroType[®] test systems based on the HyBeacon Technology

Human genetics

FluoroType [®] Factor V	Factor-V-Leiden
FluoroType [®] Factor II	Factor-II G20210A
FluoroType [®] MTHFR C677T	Polymorphism C677T in the MTHFR gene
FluoroType [®] LCT	Polymorphism C-13910T in the Lactase gene
FluoroType [®] IL28B	Polymorphism in the IL28B gene
FluoroType [®] HH C282Y	Polymorphism C282Y in the HFE gene
FluoroType [®] HH H63D	Polymorphism H63D in the HFE gene
FluoroType [®] HLA-B27	HLA-B27 Allel

Microbiology

FluoroType [®] MRSA	MRSA detection from direct material
FluoroType [®] CT	<i>Chlamydia trachomatis</i> detection from direct material
FluoroType [®] MTB	TB complex detection from direct material

Virology

FluoroType [®] HSV	Detection and differentiation of HSV-1 and HSV-2 from direct material
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Hain Lifescience GmbH

Hardwiesenstrasse 1 | 72147 Nehren | Germany
Tel.: +49 (0) 74 73- 94 51- 0 | Fax: +49 (0) 74 73- 94 51- 31
E-Mail: info@hain-lifescience.de | www.hain-lifescience.de

