



Molecular Diagnostics

# Portfolio overview

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Bruker enables precise diagnostic solutions

Innovation with Integrity

# Bruker – the world of microorganisms

The number and range of microorganisms that can infect people and animals is constantly on the rise. It is immensely important that we comprehend how microbes cause disease and resist treatment in order to maintain global public health. To help researchers and healthcare professionals identify and analyze microorganisms swiftly and accurately, Bruker offers intuitive and robust instruments and molecular diagnostics tests. Our diagnostic solutions are sought after by clinical microbiologists across the globe.

## → Molecular diagnostics

Molecular diagnostics can significantly improve patient care and laboratory management. As an increasingly popular clinical solution due to its fast and targeted results, molecular diagnostic tests need to respond to rapidly changing requirements of laboratories and regulators. Real-time polymerase chain reaction (PCR) gathers information to provide rapid results with high sensitivity and specificity, in a culture-free workflow.

## → Clinically-driven PCR

Modern real-time PCR kits are designed to improve rapid, targeted results in clinical areas that suffer from poor culture sensitivity, or where organism growth rate has an impact on clinical care and health-economic outcomes. Results from real-time PCR are used together with clinical patient observations to provide a clearer picture of the infectious disease etiology, diagnosis and best course of treatment.

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# More than 30 years of diagnostics excellence

Ever since its foundation in the 60's, Bruker has continued to grow. Integration of highly experienced molecular diagnostics companies based in Germany, Scotland and France resulted in a broadening the portfolio, offering comprehensive and streamlined PCR-based solutions to healthcare professionals in Europe and Africa.

The teams merged their expertise in developing cutting-edge technologies, enabling faster, more accurate diagnoses for patients worldwide. The shared vision of advancing medical research and improving patient outcomes remained at the core of the collective purpose.

Medical laboratories worldwide are using the company's different PCR-based assays and technical instruments for the detection of dangerous pathogens or hereditary diseases.

Established subsidiaries in Spain, the United Kingdom, France, South Africa and Kenya, as well as long-standing partners in the rest of the world, guarantee local service and support.

Half of the 250 employees of Bruker's Molecular Diagnostics division are scientists dedicated to research and development, production, quality management, and quality control.

The organization is ISO 13485 certified, and its products fulfill the European in vitro diagnostic guidelines.



# Our technologies and workflows



# DNA•STRIP technology

This well-established technology offers exceptional sensitivity and outstanding specificity. The process allows the extraction of DNA or RNA from the specimen, its amplification, and then its detection on a membrane strip using a hybridization and alkaline phosphatase reaction.

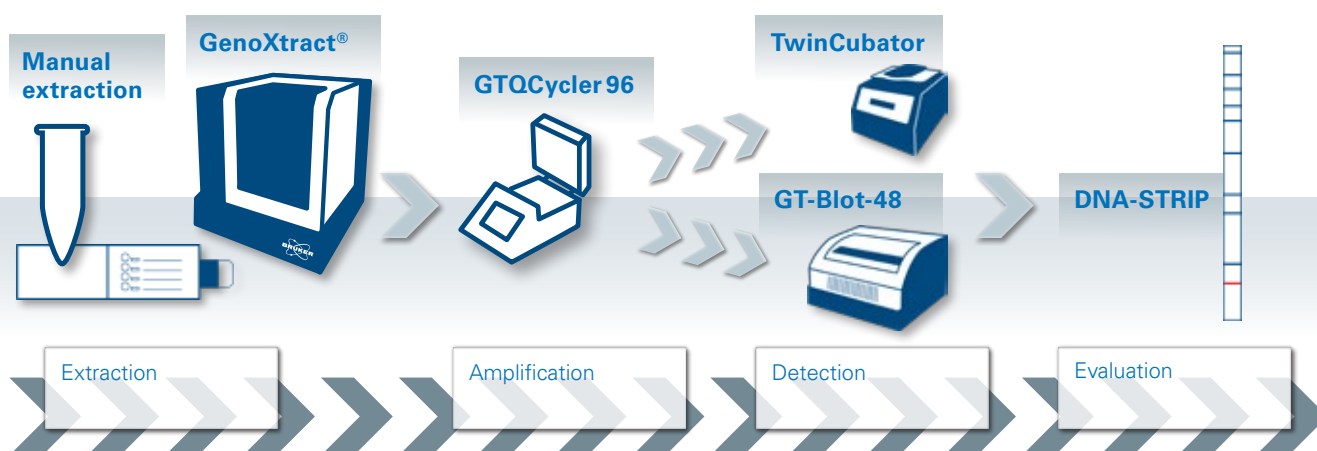
## Your benefits with the DNA•STRIP technology

- **Reliable:** Internal controls ensure valid results and guarantee precise execution of the test.
- **Highly sensitive and specific:** The selected targets in various test systems ensure a combination of high specificity and optimal sensitivity.
- **Cost-efficient:** Processing requires only minimal technical equipment, enabling an optimized implementation in all laboratory setups and sizes.
- **User-friendly:** Unlike conventional methods, the DNA•STRIP technology offers significant time savings and seamless integration into your laboratory routine.

DNA•STRIP can be performed manually or automatically.

The GenoType range of assays are supported by the DNA Strip technology, providing highly accurate and efficient molecular genetic analysis.

## Workflow

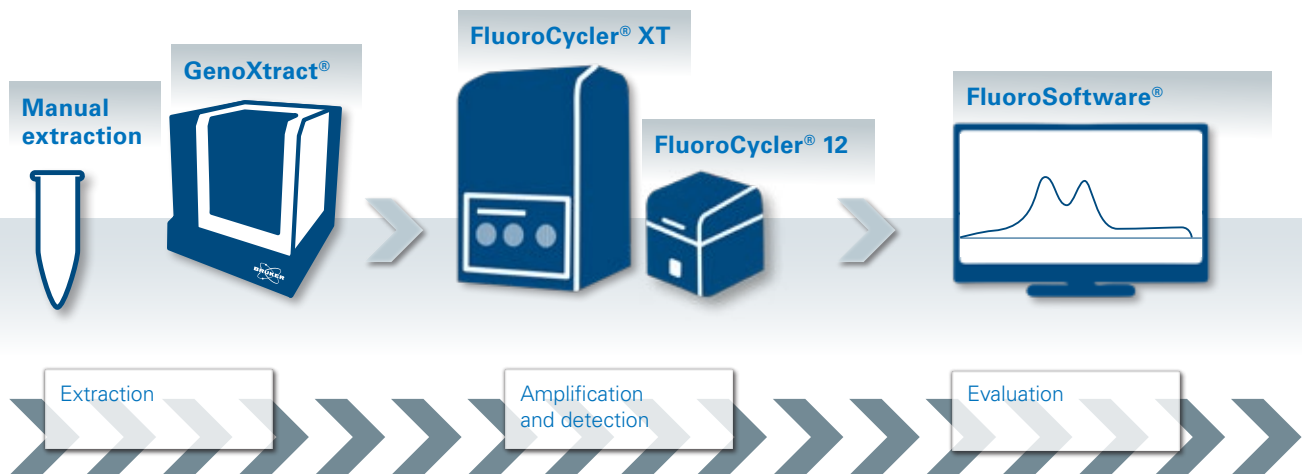


# FluoroType<sup>®</sup> technology

– with highest sensitivity and maximum specificity

Our fluorescence-based PCR test systems guarantee rapid and valid results for efficient diagnostics in your laboratory. Nucleic acids are extracted from sample materials in a first step, followed by amplification and detection using fluorescence-labeled probes. Amplification and detection are carried out with the FluoroCycler<sup>®</sup> XT or FluoroCycler<sup>®</sup> 12.

## Workflow



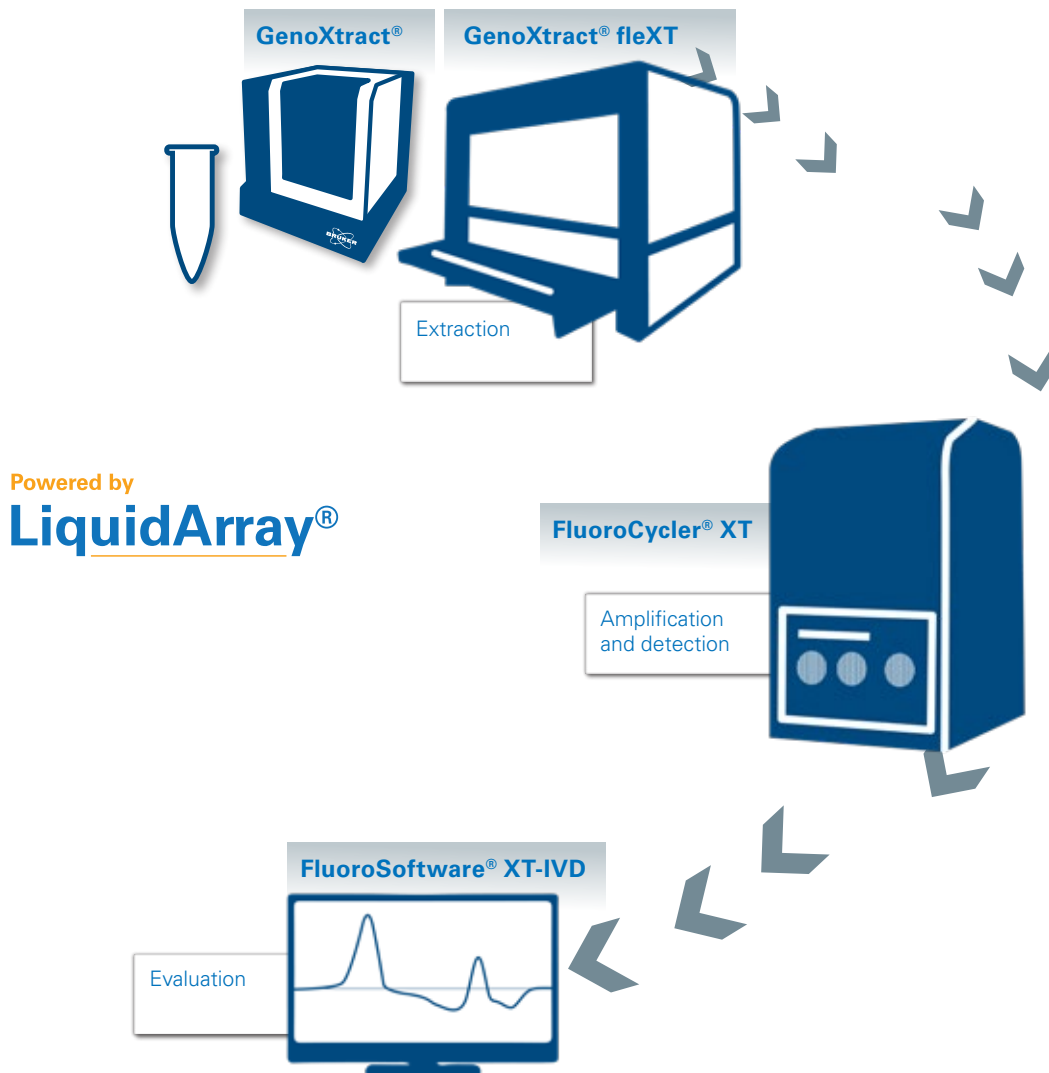
# LiquidArray® technology

– next generation multiplexing

LiquidArray technology brings next generation multiplexing to the routine clinical microbiology laboratory. Performed in a familiar PCR workflow, using innovative probe and thermocycling technologies, together with user-guided software, LiquidArray is easy to implement in the daily routine. End-to-end workflows are offered with compatible nucleic acid extraction from patient sample to results at a glance. By providing comprehensive coverage, laboratories can

streamline their diagnostic processes by replacing multiple tests with one. The power of LiquidArray has been applied to infectious disease diagnostics in the areas of mycobacteria and drug resistance detection as well as syndromic panels for sexually-transmitted, and gastrointestinal infections.

- Replace multiple tests with one
- Familiar PCR workflow
- Results at a glance



Powered by  
**LiquidArray®**

# **Kits for manual and automated extraction**





	Kit size	Part number
<b>Kits for manual extraction</b>		
GenoLyse VER 1.0	12	H-51612
GenoLyse VER 1.0	96	H-51610
SpheroLyse VER 1.0	96	H-51796
FluoroLyse VER 1.0	96	H-51696
GENO•CARD	12	G001
GENO•CARD	96	G00196
BLyse VER 1.0	24	H-51924
<b>Kits for automated extraction</b>		
<b>Cartridges for GenoXtract®</b>		
GXT DNA/RNA Extraction Kit VER 2.0	96	12.01.02
GXT Blood Extraction Kit VER 2.0	96	12.07.02
GXT NA Extraction Kit V 1.0	96	12.08.02
X2 Cartridge VER 1.0	96	12.02.02
<b>Extraction kits for GenoXtract® fleXT</b>		
GXT96 X2 Extraction Kit VER 1.0	960	520960
GXT96 X3 Extraction Kit VER 1.0	960	550960



# Comprehensive diagnostic solution

- **Mycobacteria**
- **HIV & HBV**
- **Gastrointestinal**
- **Respiratory Diseases**
- **Sexually Transmitted Infections**
- **Fungal Infections**
- **Infectious Disease Monitoring**
- **Human Genetics**
- **Viral Infections**
- **Dental**



	Technology	Kit size	Part number
<b>Mycobacteria</b>			
<b>MTB</b>			
FluoroType® MTB VER 1.0	FluoroType®	96	H-61196
FluoroType® MTBDR VER 2.0	LiquidArray®	96	H-62896
GenoType MTBDRplus VER 2.0	DNA•STRIP	12	304A
GenoType MTBDRplus VER 2.0	DNA•STRIP	96	30496A
GenoType MTBDRsl VER 1.0	DNA•STRIP	12	H-317
GenoType MTBDRsl VER 2.0	DNA•STRIP	12	317A
GenoType MTBDRsl VER 2.0	DNA•STRIP	96	31796A
GenoType MTBC	DNA•STRIP	12	H-301
<b>NTM</b>			
FluoroType® Mycobacteria VER 1.0	LiquidArray®	48	1880017
GenoType NTM-DR	DNA•STRIP	12	29712
GenoType CMdirect	DNA•STRIP	12	H-295
GenoType Mycobacterium CM VER 2.0	DNA•STRIP	12	299A
GenoType Mycobacterium CM VER 2.0	DNA•STRIP	96	29996A
GenoType Mycobacterium AS VER 2.0	DNA•STRIP	12	H-298
<b>Leprosy</b>			
GenoType LepraeDR VER 1.0	DNA•STRIP	12	H-320

	<b>Technology</b>	<b>Kit size</b>	<b>Part number</b>
<b>HIV &amp; HBV</b>			
GENERIC HIV CHARGE VIRALE	FluoroType®	220	TR001-250IC
GENERIC HIV CHARGE VIRALE	FluoroType®	440	TR001-440IC
GENERIC HBV CHARGE VIRALE version 2.0	FluoroType®	220	TR004.2-250IC
<b>Gastrointestinal</b>			
LiquidArray® Gastrointestinal	LiquidArray®	48	1896297
<b>Respiratory diseases</b>			
FluoroType® SARS-CoV-2 plus	FluoroType®	96	1877361
FluoroType® SARS-CoV-2 Q	FluoroType®	96	1891808
FluoroType® SARS-CoV-2/Flu/RSV	FluoroType®	96	1880015
FluoroType® Bordetella	FluoroType®	24	H-62424
<b>Sexually transmitted infections</b>			
FluoroType® STI VER 1.0	LiquidArray®	48	1877362
FluoroType® CT VER 1.0	FluoroType®	96	H-61096
FluoroType® HSV VER 1.0	FluoroType®	24	H-61224
FluoroType® NG VER 1.0	FluoroType®	96	H-61496
<b>Fungal infections</b>			
Fungiplex® Aspergillus IVD Real-Time PCR Kit	FluoroType®	100	1849974
Fungiplex® Aspergillus Azole-R IVD Real-Time	FluoroType®	25	1858553
Fungiplex® Candida IVD Real-Time PCR Kit	FluoroType®	100	1849973
Fungiplex® Pneumocystis IVD Real-Time PCR Kit	FluoroType®	100	1877740

	Technology	Kit size	Part number
<b>Infectious disease monitoring</b>			
<b>MRSA</b>			
GenoType MRSA-VER 3.0	DNA•STRIP	12	H-30512
FluoroType® MRSA-VER 3.0	FluoroType®	96	H-62596
<b>Carbapenemases</b>			
Carbaplex® IVD PCR Kits	FluoroType®	100	1849975
<b>Borrelia</b>			
FluoroType® Borrelia	FluoroType®	24	H-61624
<b>Human genetics</b>			
<b>Thrombophilia</b>			
ThromboType®	DNA•STRIP	12	H-241
ThromboType®	DNA•STRIP	96	24196
ThromboType® <i>plus</i>	DNA•STRIP	12	H-341
GenoType MTHFR	DNA•STRIP	12	H-252
GenoType PAI-1	DNA•STRIP	12	222
GenoType CVD	DNA•STRIP	12	H-33512
FluoroType® Factor V	FluoroType®	96	H-60396
FluoroType® Factor II	FluoroType®	96	H-60296
FluoroType® MTHFR C677T	FluoroType®	24	H-60024
<b>Hereditary hemochromatosis</b>			
GenoType HH	DNA•STRIP	12	H-245
FluoroType® HH C282Y	FluoroType®	24	H-60624
FluoroType® HH H63D	FluoroType®	24	H-60724

	<b>Technology</b>	<b>Kit size</b>	<b>Part number</b>
<b>Human genetics</b>			
<b>Food intolerance</b>			
GenoType LCT	DNA•STRIP	12	H-261
GenoType SugarTol	DNA•STRIP	12	H-26212
FluoroType® LCT	FluoroType®	24	H-60424
<b>Others</b>			
GenoType AAT	DNA•STRIP	12	H-251
GenoType ApoE	DNA•STRIP	12	H-350
FluoroType® HLA-B27	FluoroType®	96	H-60896
<b>Viral infections</b>			
FluoroType® BKV	FluoroType®	24	H-61524
FluoroType® CMV	FluoroType®	24	H-61324
FluoroType® EBV	FluoroType®	24	H-62024
FluoroType® HSV	FluoroType®	24	H-61224
FluoroType® Parvovirus B19	FluoroType®	24	H-62224
FluoroType® VZV	FluoroType®	24	H-61924
<b>Dental</b>			
micro-IDent® plus11 VER 1.0	DNA•STRIP	96	23396
micro-IDent® VER 2.0	DNA•STRIP	96	H-23296
micro-IDent® Sampling sets	DNA•STRIP	1	1876658
GenoType IL-1 VER 1.0	DNA•STRIP	12	H-5001

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# Instruments



**GenoXtract®**  
Part No. 8.31.01



**GenoXtract® fleXT**  
Part No. 1883774



**FluoroCycler® 12**  
Part No. 7027001-S



**FluoroCycler® XT**  
Part No. H-2017



**GTQ-Cycler 96**  
Part No. 7024007




**TwinCubator**  
Part No. 7025009



**GT-Blot 48**  
Part No. 1003/1

Please contact your local representative for availability in your country. Not for sale in the USA.

Unless explicitly stated, all products mentioned are  

FluoroType<sup>®</sup>, FluoroCycler<sup>®</sup>, GenoXtract<sup>®</sup>, Fluoro-Software<sup>®</sup>, LiquidArray<sup>®</sup>, Fungiplex<sup>®</sup> and Carbaplex<sup>®</sup> are registered trademarks for the Bruker corporate group.

 **Hain Lifescience GmbH**

Nehren · Germany  
Phone +49 (0) 7473-9451-0  
info.mdx.de@bruker.com  
hain-lifescience.de

 **Biocentric SAS**

Bandol · France  
Phone +33 (0) 494-290-630  
info.mdx.fr@bruker.com  
biocentric.com

**Online information**  
[bruker.com/microbiology](http://bruker.com/microbiology)

 **Bruker Daltonics GmbH & Co. KG**

Bremen · Germany  
Phone +49 (0) 421-2205-0  
info.md@bruker.com

 **Hamilton Bonaduz AG**

Bonaduz · Switzerland  
hamiltoncompany.com

