DNA•STRIP and GenoQuick®





On basis of the approved **DNA•STRIP** and **GenoQuick**® technologies we offer you a broad range of test systems for the determination of human genetic and microbiological parameters.

Your benefits of using our innovative technologies

- **Reliable:** Internal controls document valid results and secure safe and impeccable test procedures. Thus, a high diagnostic reliability is guaranteed.
- **Highly sensitive and specific:** The chosen targets of the different test systems ensure high specificity combined with maximum sensitivity.
- **Cost-efficient:** Only minimum technical equipment is needed for processing. This allows for a cost-effective implementation in all laboratories.
- User-friendly: In contrast to conventional methods, DNA•STRIP and GenoQuick® technologies both save valuable time and can easily be integrated in your laboratory routine.
- CE-marked: No need for elaborate validation studies.

DNA•STRIP technology

Assay principle

DNA•STRIPs are coated with specific probes, which are complementary to the amplified nucleic acid (amplicon). After denaturation the single-stranded amplicon specifically binds to the probes (hybridization) and is visualised in a subsequent enzymatic colour reaction. As a result a specific banding pattern develops on the **DNA•STRIP**. This procedure can be performed manually or automated.

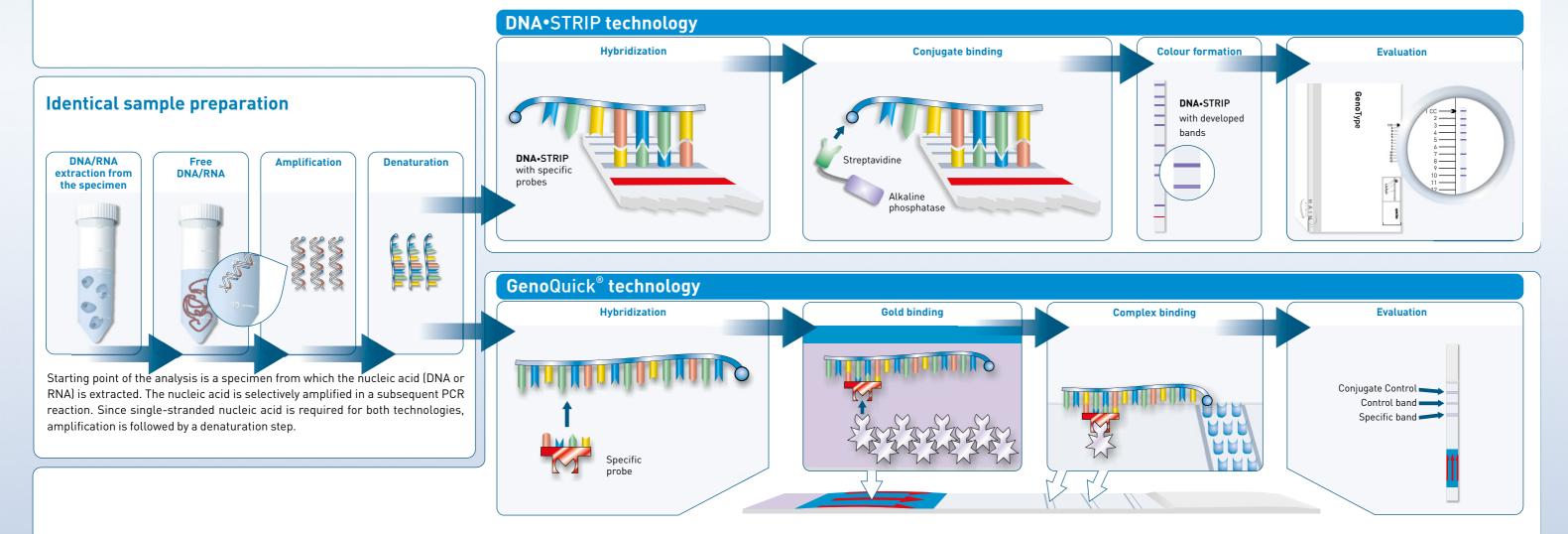
Evaluation

The evaluation of the **DNA•STRIP** can easily be performed by aligning it to a template. Consult the corresponding package insert in order to interpret the banding pattern. The genotype or microbiological organism present can thus be reliably identified.

Internal controls ensure valid results

The combination of specific amplification and hybridization guarantees a high level of diagnostic reliability. Internal controls ensure valid results:

- All **DNA•STRIP**s: The Conjugate Control documents the efficiency of the colour reaction.
- Microbiological DNA•STRIPs: The additionally integrated Universal or Amplification Control shows that the test was performed correctly.
- Human genetic DNA•STRIPs: Gene site-specific Sensitivity Controls confirm the sensitivity of the hybridization reaction. If hybridization took place under unspecific test conditions, this is documented by the Specificity Control.



GenoQuick® technology

Assay principle

The amplified nucleic acid (amplicon) hybridizes with a specific probe that contains a gold binding site. On the test strip the amplicon-probe-complex is marked with gold and subsequently attaches to a specific binding site. This reaction results in a visible band on the strip.

Evaluation

Evaluation of the strip is rather simple. A template is not required. If the specific band appears, the bacteria looked for or the genetic markers were present in the specimen.

Internal controls ensure valid results

Similar to the **DNA•STRIP** technology, the combination of specific amplification and hybridization as well as the use of internal controls ensure a high level of diagnostic reliability:

- The Conjugate Control shows the efficiency of the gold binding.
- The Control band documents a correct reaction.





Tests based on the DNA•STRIP technology

Human Genetics

ThromboType[®] Factor V Leiden, Factor II G20210A

ThromboType®plus Factor V Leiden, Factor II G20210A, MTHFR C677T, A1298C

GenoType CVD Eight different thrombophilia-associated mutations

GenoType MTHFR Most important MTHFR polymorphisms GenoType ApoE Alleles $\epsilon 2$, $\epsilon 3$, $\epsilon 4$ of the ApoE gene GenoType PAI-1 Most important PAI-1 polymorphisms

GenoType HH Hereditary hemochromatosis

GenoType AAT Alpha-1-antitrypsin deficiency allele

GenoType LCT Most important polymorphisms of the lactase gene

GenoType SugarTol Polymorphism in lactase gene C-13910T and 3 polymorphisms in aldolase B gene

Microbiology

GenoType MTBC MTB complex differentiation from culture

GenoType CMdirect MTB complex, NTM differentiation from clinical specimens

GenoType Mycobacterium CM MTB complex, NTM differentiation from culture Further NTM differentiation from culture GenoType Mycobacterium AS

GenoType NTM-DR NTM differentiation, resistance to microlides and aminoglycosides from culture GenoType MTBDRplus MTB complex, resistance to rifampicin/isoniazid from clinical specimens and culture

GenoType MTBDRsl VER1.0 MTB complex, resistance to fluoroquinolones/aminoglycosides/cycl. peptides/

ethambutol from clinical specimens and culture

GenoType MTBDRsl VER2.0 MTB complex, resistance to fluoroquinolones/aminoglycosides/cycl. peptides from

clinical specimens and culture

M. leprae, resistance to rifampicin/ofloxacin/dapsone from clinical specimens GenoType LepraeDR

S. aureus, S. epidermidis, further S. spec., mecA, PVL from culture GenoType Staphylococcus

GenoType MRSA S. aureus, S. epidermidis, mecA, mecC, PVL from culture

GenoType HelicoDR H. pylori, resistance to fluoroquinolones/clarithromycin from clinical specimens and culture

GenoType EHEC Shiga toxins, virulence factors from culture

GenoType Enterococcus Species differentiation, resistance to vancomycin from culture

GenoType BC grampositive Gram-positive bacteria from blood culture GenoType BC gramnegative Gram-negative bacteria from blood culture

GenoType CDiff C. difficile, toxins, deletions in tcdC, ribotype 027 from clinical specimens and culture

micro-IDent® 5 periodontopathogenic bacterial species micro-IDent®plus11 11 periodontopathogenic bacterial species

Tests based on the GenoQuick® technology

Human Genetics

GenoQuick® HLA-B27 HLA-B27 allele

Microbiology

GenoQuick® MRSA MRSA from clinical specimens

GenoQuick® CT Chlamydia trachomatis from clinical specimens

GenoQuick® MTB MTB complex from clinical specimens

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



L_JN0418008_0318