IVD

DNA•STRIP Technology

Convenient diagnostic assays

DNA•STRIP technology for dependable diagnostics

- Reliable
- Highly sensitive and specific
- Cost-efficient
- User-friendly

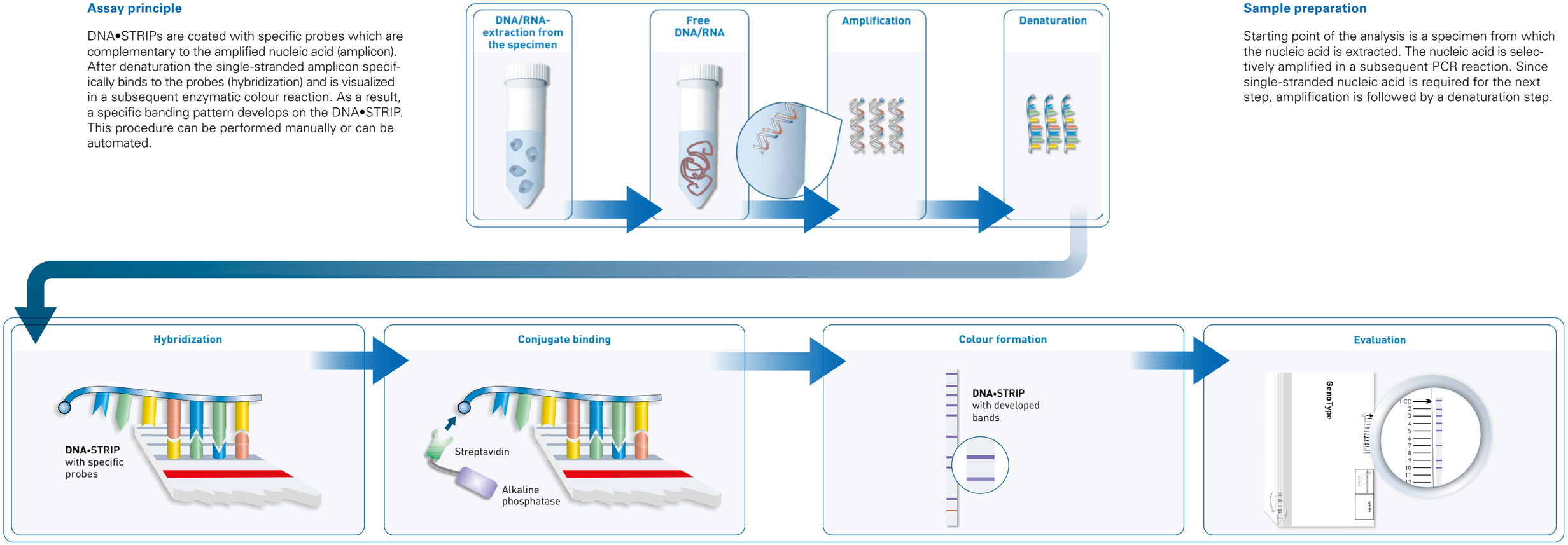
PCR

Innovation with Integrity

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 visualized 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 can be automated.



Sample preparation

Starting point of the analysis is a specimen from which the nucleic acid is extracted. The nucleic acid is selectively amplified in a subsequent PCR reaction. Since single-stranded nucleic acid is required for the next step, amplification is followed by a denaturation step.

Benefits of using the DNA•STRIP technology

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, the DNA•STRIP technology saves valuable time and can easily be integrated in your laboratory routine.

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•STRIPs: 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.

Evaluation

The evaluation of the DNA•STRIP can easily be performed by aligning it to a template. With the corresponding IFU the developed banding pattern can be interpreted accurately and quickly. This allows a reliable detection of the bacteria or genotype present in the sample.

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 ε2, ε3, ε4 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 CM*direct*	MTB complex, NTM differentiation from clinical specimens
GenoType Mycobacterium CM	MTB complex, NTM differentiation from culture
GenoType Mycobacterium AS	Further NTM differentiation from culture
GenoType NTM-DR	NTM differentiation, resistance to microlides and aminoglycosides from culture
GenoType MTBDR*plus*	MTB complex, resistance to rifampicin/isoniazid from clinical specimens and culture
GenoType MTBDR*sl* VER1.0	MTB complex, resistance to fluoroquinolones/aminoglycosides/cycl. peptides/ethambutol from clinical specimens and culture
GenoType MTBDR*sl* VER2.0	MTB complex, resistance to fluoroquinolones/aminoglycosides/cycl. peptides from clinical specimens and culture
GenoType LepraeDR	*M. leprae*, resistance to rifampicin/ofloxacin/dapsone from clinical specimens
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
micro-IDent®	5 periodontopathogenic bacterial species
micro-IDent®plus11	11 periodontopathogenic bacterial species

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