

Mentype[®] DIPplex

The new alternative for clinical sample analysis



The identification of clinical samples is commonly based on the analysis of short tandem repeats (STRs) or single nucleotide polymorphisms (SNPs) depending on the demands of an examination or on the sample quality. While being able to merge the advantages of both STRs and SNPs, biallelic **Deletion/Insertion Polymorphisms (DIPs)** have yet substantial capability regarding sample analysis.

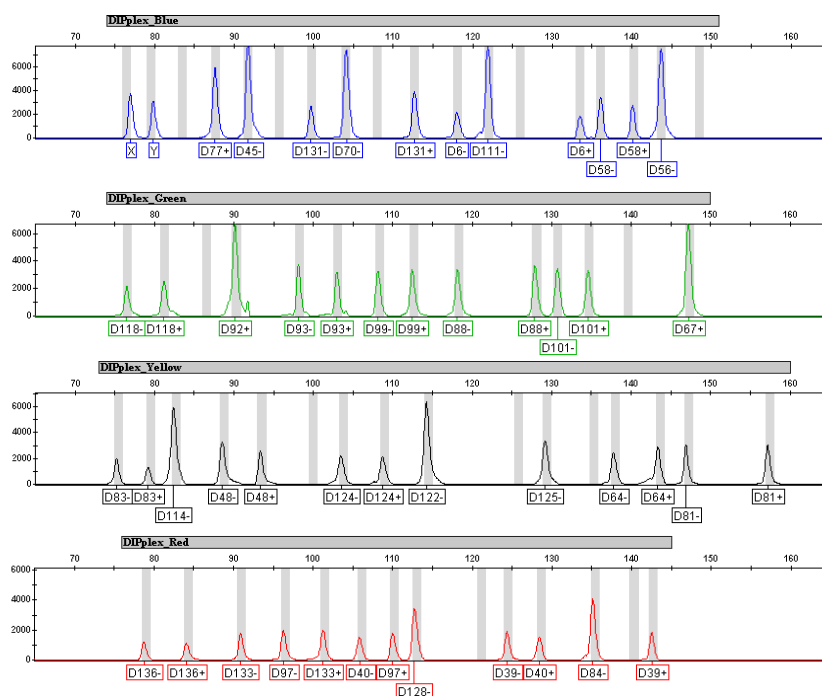
Bio type[®]

Mentype[®] DIPplex PCR Amplification Kit offers you:

- multiplex-analysis of 30 DIPs plus Amelogenin distributed over 19 autosomes that are at least 10 Mbp away from all commercially available STRs and SNPs
- absence of stutter peaks which makes the assay extremely suitable for mixed stain analyses
- restricted amplicon length to ~150 bp making the assay perfectly suitable for critical stain analyses as from bones or tissue cells
- analysis on all known ABI PRISM[®] Genetic Analyzers with Genotyper[®] or GeneMapper[™] ID software in combination with the special **freeware DIP Sorter** for easy interpretation of the results
- same cost and time resources like STRs - in contrast, SNP analysis is much more time-consuming and requires further lab equipment
- no market restrictions: available all over the world!

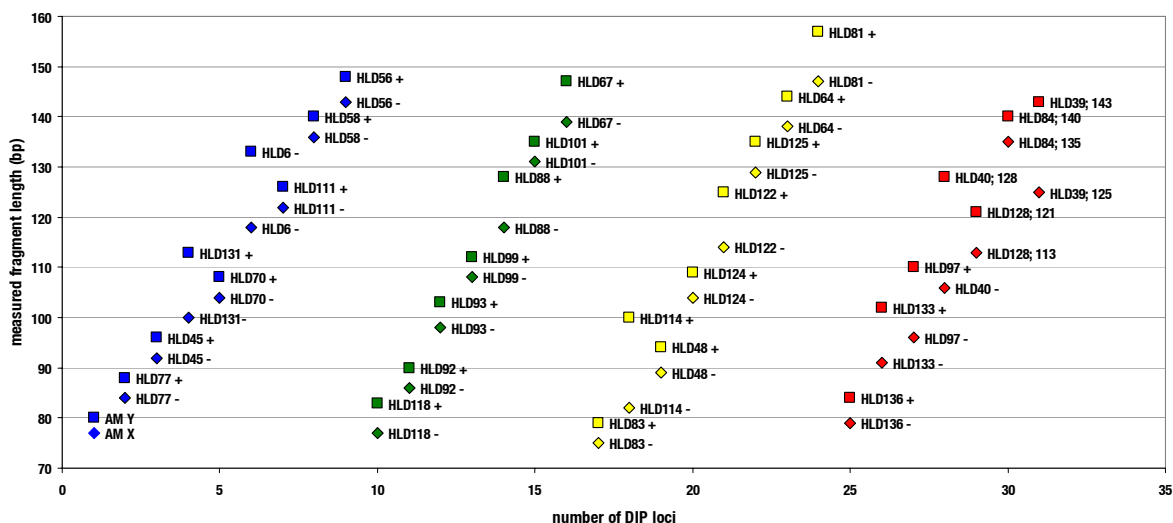


Example of use: Reliable profiling of 30 DIP markers and Amelogenin



Electropherogram of Mentype[®] DIPplex PCR Amplification Kit. Use of Control DNA XY5 analysed on an ABI PRISM[®] 3130 Genetic Analyzer with GeneMapper[™] ID software

Schematic description of 30 DIPS and Amelogenin allocated within the Mentype® DIPplex PCR Amplification Kit



Maximal amplification length is restricted to ~150 bp (HLD = Human Locus DIP; □ +DIP, ◇ -DIP)

Discrimination capacity

	Mentype® DIPplex	AmpFISTR® Minifiler™	AmpFISTR® SEfiler plus™	Powerplex® 16	www.SNPforID.org
Population	German	US Caucasian	US Caucasian	US Caucasian	European
Locus	30 DIPS	8 STRs	11 STRs	15 STRs	52 SNPs
CPI*	2.83×10^{-13}	8.21×10^{-11}	7.46×10^{-14}	5.46×10^{-18}	5.0×10^{-21}
CPE/Trio**	0.9980	0.99976	0.999998	0.9999994	0.9998

* combined probability of identity, **combined probability of paternity exclusion

Technical specification

Detection limit: 100 pg genomic DNA
 Optimal amount of template DNA per reaction: 100-500 pg
 Volume per PCR sample: 25 µL
 Fluorescence labels: 6-FAM, BTG, BTY, BTR, BTO

Use with

ABI PRISM® 310 Genetic Analyzer
 ABI PRISM® 3130/3130xl Genetic Analyzer
 ABI PRISM® 3100-Avant/3100 Genetic Analyzer
 ABI PRISM® 3730 DNA Analyzer

Ordering information

Product	Content	Cat. No.
Mentype® DIPplex	25 reactions	45-31110-0025
Mentype® DIPplex	100 reactions	45-31110-0100
Mentype® DIPplex	400 reactions	45-31110-0400
Biotype® Matrix Standard BT5 for ABI single-capillary instruments	25 µl	00-10410-0025
Biotype® Matrix Standard BT5 for ABI multi-capillary instruments	25 µl	00-10421-0025
Biotype® Matrix Standard BT5 for ABI multi-capillary instruments	50 µl	00-10421-0050



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