

Mentype® AMLplex^{QS}

Discover the course of acute myeloid leukaemia

Mentype® **AMLplex^{QS}** is a cDNA-based multiplex-PCR analysis designed for subtype differentiation and diagnosis of acute myeloid leukaemia (AML). The assay identifies 11 fusion gene transcripts and 34 transcript variants in a single PCR amplification. As the ideal screening tool for fast, routine-fit and reliable diagnostics Mentype® **AMLplex^{QS}** covers a wide range of therapy-relevant chromosomal aberrations (see table below). The test is performed by fragment length analysis using capillary gel electrophoresis as read out.

Mentype® **AMLplex^{QS}** mediates highest specificity, is well established, and, routinely used in AML-diagnostics. Robust performance is guaranteed irrespective of the amount of cDNA applied. Due to the multiplex-format, Mentype® **AMLplex^{QS}** streamlines, time-wise and economical, the diagnostic procedure by allowing high throughput screening (HTS) when compared to singleplex-PCR approaches. It represents the intelligent, efficient and reliable solution to screen chromosomal aberrations observed in AML-disease.



Chromosomal aberrations and variants of acute myeloid leukemia (AML) detected

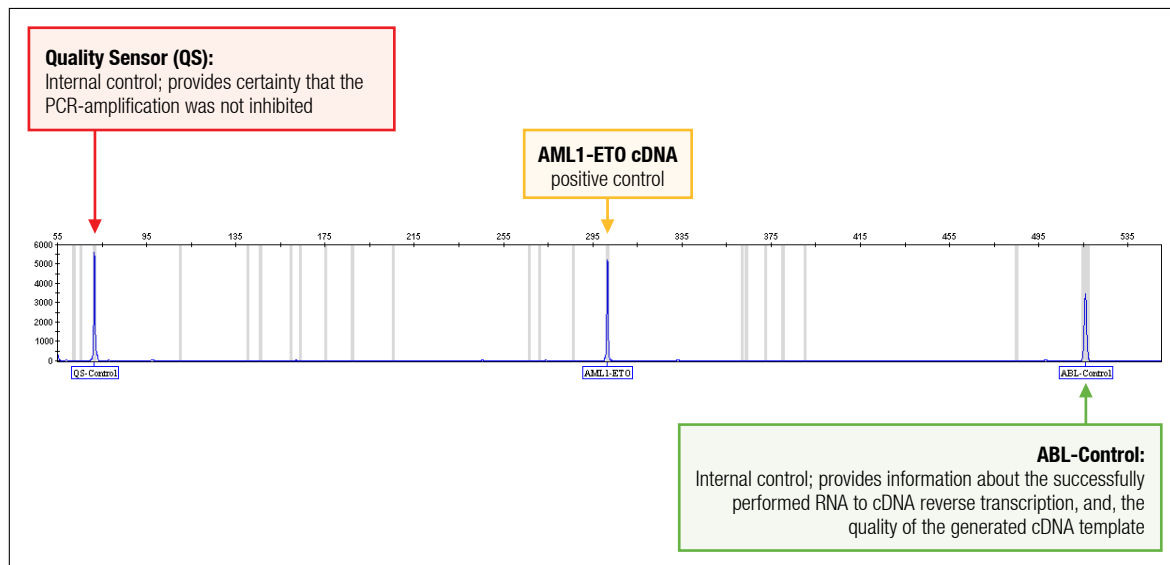
Gen-fusions	Chromosomal aberrations	Variants
AML1-ETO	t(8;21) (q22;q22)	-
BCR-ABL	t(9;22) (q34;q11)	e1a3
		e1a2
		b3a2
		b3a3
		b2a2
		b2a3
CALM-AF10	t(10;11) (p13;q14)	AF10_240-CALM_1987
		AF10_240-CALM_2092
CBFB-MYH11	inv(16) (p13;q22)	Type A
		Type B
		Type C
		Type D
		Type E
		Type F
		Type G
		Type H
		Type I
		Type J
DEK-CAN	t(6;9) (p23;q34)	-
MLL-AF6	t(6;11) (q27;q23)	-
MLL-AF9	t(9;11) (p22;q23)	6A_(THP-1)
		7A_(10A)
		8A_(MM6)
		6B_(9B)
MLL-ELL	t(11;19) (q23;p13.1)	e10e2
		e10e3
MLL-PTD	Partial Tandem Duplication	e9e3
		e10e3
		e11e3
NPM1-MLF1	t(3;5) (q25.1;q34)	-
PML-RARA	t(15;17) (q22;q21)	bcr1 (PR-L)
		bcr2 (PR-V)
		bcr3 (PR-S)

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Mentype[®] AMLplex^{QS} secures obtained result by two internal controls that do not require extra reagents. A Quality Sensor (QS) provides certainty that the PCR-amplification was not inhibited. The ABL-control provides information about the successfully performed RNA to cDNA reverse transcription, and, the quality of the generated cDNA template. Additionally, Mentype[®] AMLplex^{QS} comes with AML1-ETO cDNA that might be applied as positive control. A triple-fold safeguard of obtained results together with accurate performance and clear read out enforces decision making.

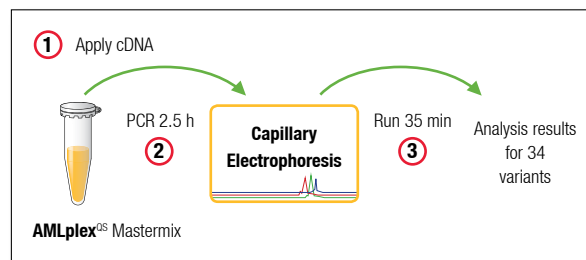
Fundamental profiling is vital for a fast therapeutic onset



Electropherogram of the Mentype[®] AMLplex^{QS} control-setup using 500 ng of AML1-ETO cDNA. Analysis performed on an ABI PRISM[®] 3130 Genetic Analyzer with the DNA Size Standard 550 (BTO) using the GeneMapper[®] ID Software.

When to apply:

Mentype[®] AMLplex^{QS} is ideally suited to stratify patient cohorts for study purposes and optimally completes cytogenetic approaches to initially diagnose AML. Due to its multiplex design it advances the laboratory routine by increasing efficiency and reducing costs. It therefore likewise optimally suits for laboratory control purposes.



Technical specifications

Optimal amount of template cDNA per reaction:
0.2 - 1.0 µg
Volume per PCR reaction: 25 µL
Fluorescence labels: 6-FAM[™], BTG, BTY, BTO

Use with ABI PRISM[®] Genetic Analyzers

ABI PRISM[®] 310
ABI PRISM[®] 3130/3130xl/3500/3500xl
ABI PRISM[®] 3100-Avant/3100
ABI PRISM[®] 3700/3730

Ordering information

Mentype [®] AMLplex ^{QS}	Order number
25 reactions	45-31220-0025
100 reactions	45-31220-0100
400 reactions	45-31220-0400

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