

Mentype[®] DigitalQuant

SENSITIVE DNA QUANTIFICATION FOR ADVANCED MIXED DNA ANALYSIS

GENERATE RELIABLE RESULTS FROM A LOW NUMBER OF CELLS

Compared to other quantitative PCR methods, digital PCR does not require replicates to reliably quantify DNA targets of interest. Therefore, the Mentype[®] **DigitalQuant** assays are used with just 5-120 ng total DNA to identify the minor DNA in a mixed DNA background (Figure 1).

Mentype[®] **DigitalQuant** assays were verified on the Droplet Digital[™] PCR platform (Bio-Rad Laboratories, Inc.) and the Applied Biosystems[™] QuantStudio[™] 3D (Thermo Fisher Scientific), thereby making it available for most digital PCR user.

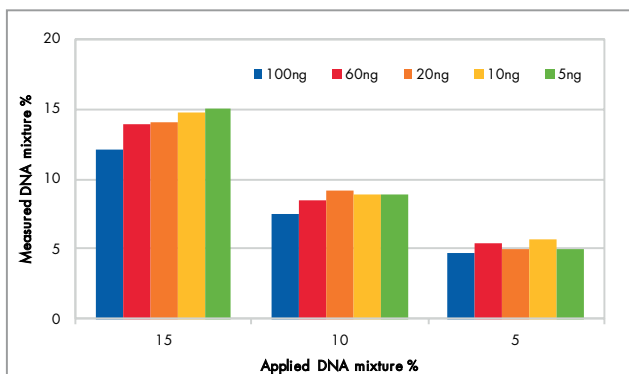


Figure 1: Analysis of a defined DNA mixture using varying DNA inputs per reaction with Mentype[®] **DigitalQuant**.

HIGH SENSITIVITY COMBINED WITH A LARGE DYNAMIC RANGE

Compared with other technologies, digital PCR allows the analysis within a large range of DNA ratios (Figure 2).

The assay is optimized to reliably achieve a sensitivity of 0.1 % using 50 ng of genomic DNA.

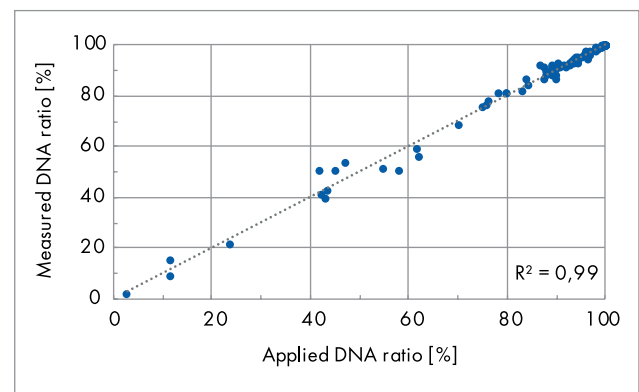


Figure 2: Analysis of defined DNA mixtures with assays of Mentype[®] **DigitalQuant**.

HIGH REPRODUCIBILITY WITH DIGITAL PCR

In digital PCR, the high number of replicates lead to highly reproducible and therefore reliable results.

Serial dilution [%]	Ratio with different DigitalQuant assays [%]												Mean [%]	Standard deviation
	70-D +REF	70-D +SRY	88-I +SRY	114-I +REF	114-I +SRY	128-D +REF	128-D +SRY	131-I +REF	131-I +SRY	133-I +REF	133-I +SRY	152-D +SRY		
0.1	0.14	0.16	0.12	0.1	0.12	0.12	0.16	0.15	0.14	0.12	0.19	0.13	0.14	0.03
1	1.2	1.2	1.2	1.2	1.1	1.3	1.1	1.0	1.1	1.2	1.2	1.2	1.2	0.08
50	50.7	52.7	51.5	50.6	45.5	51.3	52.5	46	49.7	47.2	52.9	50	50	2.65

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Applied Biosystems[™] QuantStudio[™] is a trademark of Thermo Fisher Scientific.