



DIGITAL REAL-TIME PCR

Dr. PCR

SIMPLICITY AT ITS FINEST



LOAA

Everything can be digitized

LOAA (Lab On An Array) is a partitioned well-based PCR system. It adopts a semiconductor, a CMOS photo sensor that enables real-time digital PCR, real-time PCR and multiplex PCR in one platform.

LOAA Digital PCR has the simplest workflow. The PCR and analysis can be performed in one system. It does not require any other supporting instruments, like another thermal cycler, droplet generator or well partitioning instrument. Each individual PCR reaction can be performed in a finely divided well of the cartridge which is loaded by simple injection of samples to be analyzed.

- Stand alone Digital PCR analyzer
- Interactive 5.5" touch screen
- Remote status monitoring
- Barcode built-in system
- Intuitive user interface



20K wells



5K wells

Digital PCR

Every test in an hour | Pre-partitioned wells | The simplest Digital PCR workflow

Viral load determination

Check a numerical expression of the quantity of virus in a given volume
HIV, CMV, HBV, HCV

NGS library validation

Quantifies and normalizes sample variants

Copy number variation

Confirm whether the copy number of a sequence of interest deviates from wild type and by how much

Gene expression

Detects very small difference in gene expression level

Single cell analysis

Can detect expression levels of multiple genes in a set of single cells

LOAA is a unique digital PCR platform which can perform absolute quantitation in a real time fashion. You can see the real-time PCR amplification curves throughout your digital PCR process. LOAA also provides an easy and user-friendly solution for digital PCR. A specially designed LOAA cartridge and cartridge loader allow you to simply 'load and go' in less than 2 minutes.

Digital PCR, Easier than ever



STEP 1.
Prepare dPCR mixture



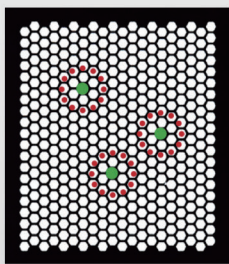
STEP 2.
Prepare Dr. PCR cartridge



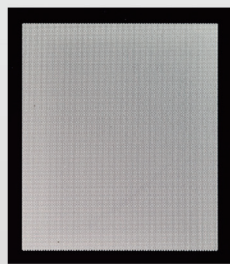
STEP 3.
Amplify & Interpretation

Digital Real-Time PCR Workflow

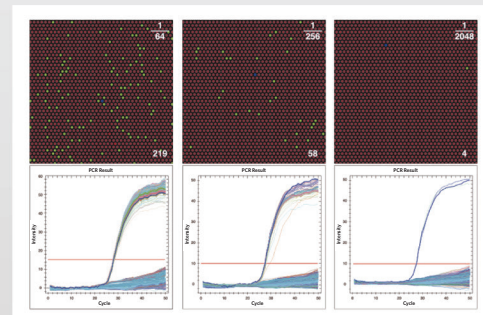
Digital Real-Time PCR Absolute quantification



400 target qPCR test



20K-well Digital PCR test

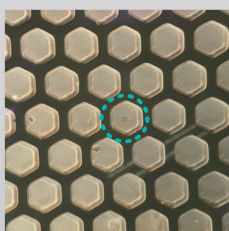


Dilution

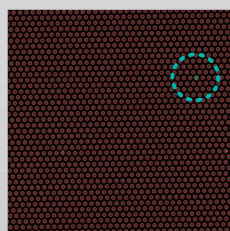
Copy No.

Two-fold serial dilution of sample: HeLa gDNA
Target: Glob

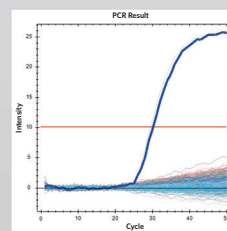
Digital Real-Time PCR Single Cell Analysis



Single cell in well



Hela, Single cell amplify



Analysis

The simplest workflow

Minimal hands-on time

2-Color fluorescent signal

The Simplest Digital PCR Workflow Just 3 steps to get result





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Ordering information

Cat No.	Product name
LAM301	LOAA Analyzer
DPM401OX	Dr.PCR 20K Cartridge(30T)
DPM402OX	Dr.PCR 5K Cartridge(30T)