The magic is inside
Nanoplate-based digital PCR system

Why plate?

- Fixed partitions prevent variation in size and coalescence as seen in droplets
- Sealed nanoplates eliminate risk of contamination
- Simultaneous reading of all partitions/well allows quicker time-to-result
- User-friendly, PCR-like plates provide a more familiar workflow
- Plates are amenable to front-end automation
A rapid and simplified plate-based workflow

The nanoplate-based digital PCR system provides a more familiar workflow, just like in qPCR experiments. The system integrates partitioning, thermocycling, and imaging into a single fully automated instrument that takes users from sample to result in under two hours.

Features and benefits

With flexible instrument, plate configurations, and up to five detection channels, the nanoplate-based digital PCR system is capable of displacing qPCR as the method of choice for high-throughput quantification of nucleic acid targets.
The QIAcuity instruments and nanoplates

A fully integrated digital PCR solution for absolute quantification

The system offers distinct plate types with partitions designed to accommodate flexible throughput and sensitivity requirements.

<table>
<thead>
<tr>
<th>Plate type</th>
<th>Samples/plate</th>
<th>Partitions/well</th>
<th>Input volume/well</th>
<th>Key applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nanoplate 26K 24-well</td>
<td>24</td>
<td>approx. 26,000</td>
<td>40 µl</td>
<td>Rare mutation detection, liquid biopsy, and more</td>
</tr>
<tr>
<td>Nanoplate 8.5K 24-well</td>
<td>24</td>
<td>approx. 8,500</td>
<td>12 µl</td>
<td>CNV detection, NGS library quantification, and more</td>
</tr>
<tr>
<td>Nanoplate 8.5K 96-well</td>
<td>96</td>
<td>approx. 8,500</td>
<td>12 µl</td>
<td>CNV detection, NGS library quantification, and more</td>
</tr>
</tbody>
</table>

Applications

- Rare mutation detection
- Copy number variation
- Gene expression, miRNA detection
- Pathogen detection
- GMO detection
- NGS validation
- Microbiome analysis
- Characterization of reference standards
- Liquid biopsy
Are you interested in learning more about our digital PCR system and applications? Watch the recordings on-demand.

Visit www.qiagen.com/dPCR for more information.