

Qiagen unveils novel tools for customising digital PCR assays and NGS panels for microbial analysis

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First-of-its-kind custom assay design tool for microbial digital PCR assays

Qiagen has announced the launch of two new tools for designing and ordering custom solutions that can be used to support microbial analysis of bacterial, fungal and viral targets.

These new tools enable researchers to customize their assays and panels for use on the QIAcuity digital PCR system as well as on any third-party next-generation sequencing (NGS) system. They also build on more than 700 digital PCR assays that are currently available for microbial targets through the GeneGlobe platform.

The new products make nanoplate digital PCR (dPCR) suitable for even more microbial targets in applications ranging from wastewater testing to food production to analysis of human pathogens. With nanoplate dPCR, rare targets in low-biomass samples with high levels of PCR inhibitors can be measured without a standard curve and with high accuracy and precision.

"The demands for microbial detection, tracking and scientific research can be extremely specialised. Reliable and accurate tools that can be customised give scientists the flexibility they need to outpace pathogens and accelerate the tempo of discovery," said Nitin Sood, Senior Vice President and head of QIAGEN's Life Sciences Business Area. "With the launch of our design tool for Custom dPCR Microbial Assays and the new QIAseq xHXB panels, we are addressing the demands of our customers. QIAGEN will continue to expand our offering of accurate, reliable and easy-to-use solutions."

Design tool for Custom dPCR Microbial Assays – The first-of-its-kind custom assay design tool enables users to design primers and probes for their specific microbial targets of interest and is tailored specifically for bacterial, fungal and viral targets.

QIAseq xHYB Custom Microbial Panels – Customers can completely design their own NGS panels, overcoming limitations of panels offered by other vendors, which are designed against a few genomes of a given target and thereby often cause large gaps in coverage. The QIAseq xHYB Custom Microbial Panels advanced algorithm enables researchers to design their assays against many whole genomes at once, allowing them to achieve the highest possible resolution in applications such as microbial detection.

QIAGEN continues to expand its portfolio dPCR assays, supporting laboratories to increase their detection capabilities and improve their results.