



## qPCR / digital PCR

### Assay Development, Validation and Analysis

### Trust in our Experience

Extensive experience in the design, development, validation and application of qPCR and digital PCR assays.

### Cost-Effective and Fast

Knowledge and technology available to develop, validate and produce everything in-house.

### Customized

From highly modified probes to the adequate degree of compliance to relevant regulations and guidelines, your project will be customized to your needs.

## Introduction

Microsynth, a leading provider of molecular biology services, offers a broad range of PCR services and products. More than 20 years of experience with customer projects of any size, our

in-depth understanding of DNA/RNA quantification and our in-house production facility for oligonucleotides qualify Microsynth as your partner of choice for the development and validation of qPCR

and digital PCR assays. Microsynth is also a competent and reliable partner for the subsequent performance of biological analyses, regardless of scale.

## Microsynth's Services and Applications

	Digital PCR	Real-Time PCR
<b>Overview</b>	Re-arrangement of the sample in thousands of nanoliter end-point PCR reactions allows determination of the absolute concentration of the analyte.	Measures accumulation of the PCR amplification product as it occurs.
<b>Top Features and Applications</b>	<ul style="list-style-type: none"> <li>Quantification of the rare alleles and genetic sequences from more abundant background: ideal for mutation/SNP quantification in liquid biopsies, chromosomal translocations, etc.</li> <li>Higher resolution in quantification, compared to real-time PCR: finally precise and accurate quantification of the vector copy number (VCN) and gene editing events (CRISPR/Cas9).</li> <li>Absolute quantification of DNA/RNA: harmonized measurements between facilities and research groups, quantification of the reference material/plasmids.</li> <li>Robust performance in complex matrices: superior quantification in environmental samples, waste water (Pathogens like SARS-Cov-2).</li> </ul>	<ul style="list-style-type: none"> <li>Wide dynamic range for gene expression analysis</li> <li>A gold standard in pathogen detection</li> <li>Multiplex screening of the samples for the presence of the desired targets</li> </ul>

## Advantages of Working with Microsynth

- Strong experience in digital PCR and qPCR assay design and validation
- State-of-the-art equipped facility with motivated staff dedicated to conduct biological testing for you
- Easy publishing due to compliance with MIQE guidelines (full transparency with respect to sequence information of used primer and probes)
- Validation is performed in compliance with appropriate regulations (e.g. ICH Q2(R1))
- In-house production facility (ISO 13485 certified) for synthesis of primer-probe sets meeting the highest requirements (MGB, LNA, propynyl bases, etc.)
- Useful toolbox in complementary analytical platforms (Sanger, NGS, isolation of nucleic acids), all operated in-house
- Satisfied customers from all over the world. Ask us for references.



Figure 1: Modular PCR-based analytics portfolio to outsource your entire PCR projects or parts of it.

### Need more information or a quote?

Call us at +41 71 726 12 50 or

email us at [info@microsynth.ch](mailto:info@microsynth.ch)