

Premium qPCR Assays: Customized and Ready-to-Use

Single - or Multiplex Assays

Highly Cost-Effective - Developed, QC-tested and produced in-house

Various Additional Services Possible

Customized Assays

Standard off-the-shelf qPCR assays are far from being satisfactory for all applications (e.g. due to unspecific amplification, cross reaction). Customized qPCR assays from Microsynth are the smart alternative. Based on your sequence data (e.g. accession number) and any other critical information we may receive from you, Microsynth first invests in proper design of your primer/probe set. Optimal design is achieved by applying state-of-the-art software but also by relying on our expert know-how in the area of qPCR. Following design, the specified primer/probe set is carefully synthesized within our own oligo production facility.

Your Overall Benefits Include

Design and production of **customized and ready-to-use qPCR assays** (singleplex or multiplex) **in compliance with MIQE-guidelines** - In-house produced and **QC-tested primer/probe sets for >2000 PCR reactions** - **Cost-**

Proven Functionality

In contrast to many other qPCR assay suppliers, Microsynth does not sell any assay which have not undergone and passed its thorough and proprietary functionality testing approach. Key strategy here is the synthesis and application of an artificial template (positive control). Serial dilutions of this positive control allow to generate a standard curve at specific primer/probe concentrations. Finally, the PCR efficiency as well as the linear dynamic range can be determined for each qPCR assay.

effectiveness in the long run: You can reproduce your assay by just reordering the primer/probe set - **You are in good hands:** Microsynth has >20 years experience in DNA oligonucleotide synthesis and >10 years experience in real-time

Full Transparency

All our qPCR assays are fully compliant with MIQE guidelines[1]. You obtain a Certificate of Analysis (CoA) which includes the complete sequence information for your primer/probe set as well as all test parameters (ΔC_t for non-template control, ΔC_t for template control, assay efficiency & linearity) derived at optimal conditions. It also lists best found primer/probe concentrations within the master mix as well as all cycling parameters. The final product includes lyophilized primers, the lyophilized probe (in form of 4 aliquots) as well as the dissolved positive control.

[1] Bustin et al. (2009). Clinical Chemistry 55:4. The MIQE guidelines: minimum information for publication of quantitative real-time PCR experiments.

PCR – Microsynth is certified according to ISO 9001:2008 – **Various additional services possible:** Microsynth can also perform DNA/RNA isolation from virtually any tissue/cell source or even run the entire qPCR project for you.

Need More Information?

Call us at +41 71 726 12 50

E-mail us at real-time@microsynth.ch

Important – Please Note!

Microsynth also sells numerous off-the-shelf multiplex qPCR kits for food testing. All kits have been developed and validated by Dr. Rene Köppel from the Zurich Cantonal Laboratory.