



OEM by QIAGEN



# Accelerate Your Innovation

## Partnership & confidentiality

Reach the right “make or buy” decision. Outsourcing components from OEM by QIAGEN is an effective alternative to in-house R&D and manufacturing. With full confidentiality, we build long-lasting and trusted partnerships based on dependability and understanding.

## Innovation & expertise

Reduce investment costs and get your product to the market faster. We have a deep understanding of molecular workflows for various applications in life science and regulated markets and have the expertise to help you navigate the rocky waters of R&D, regulatory environments, compliance procedures, high-quality production, storage and distribution.

## Quality at scale

Make no compromises on quality when scaling up your production. We manufacture with outstanding quality control processes in ISO-certified facilities and offer global support with offices located worldwide.

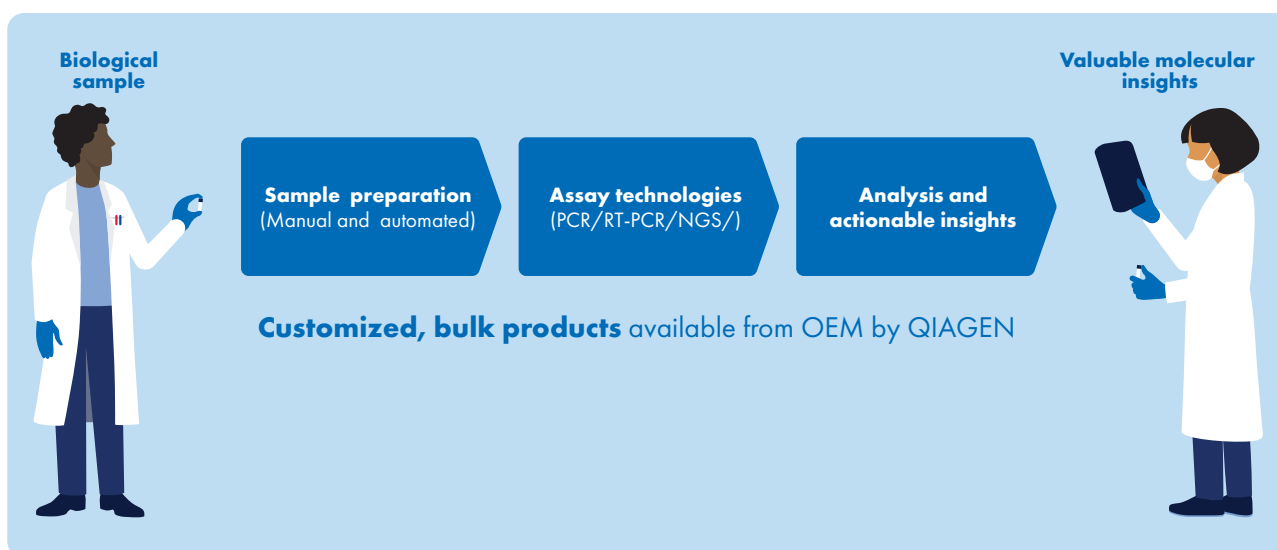
## Agility & flexibility

Pick from individual components or entire workflows tailored to your wishes and needs. Spin columns, PCR master mixes, commercial enzymes, custom and modified oligos, buffers, reagents and much more are all available from OEM by QIAGEN. Be sure to check out our expanded portfolio.

## Accelerate your time to market by partnering with OEM by QIAGEN

You need to bring your innovations to the market fast without sacrificing quality or reliability. Why not simplify your product journey by partnering with OEM by QIAGEN? We provide customized assistance, tailored to your needs.

Our project managers are agile and flexible, guiding you through all the steps of product development – from prototype to manufacturing, packaging and labeling. Rely on us from day one for customized OEM with fast turnaround, full confidentiality, and a full array of products in our expanded portfolio from Sample to Insight®.

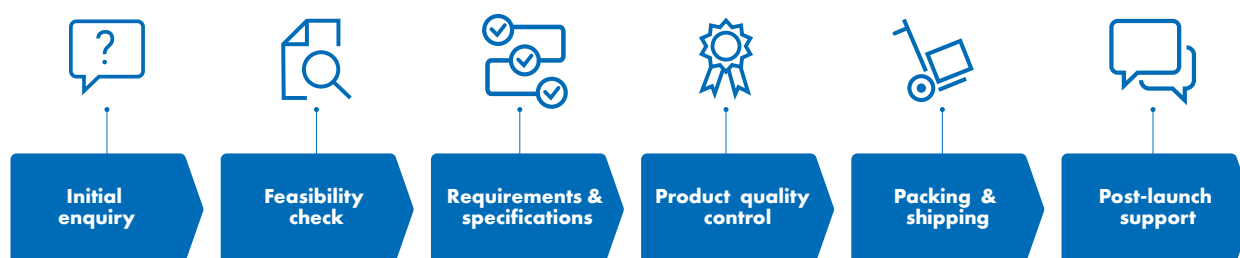


Pick and choose components from the expanded QIAGEN® product range, including:

- Enzymes
- Oligonucleotides
- DNA/RNA extraction technologies
- Master mixes
- NGS kits and components

## OEM made easy at every step of your product journey

Our dedicated OEM project managers will support you every step of the way in turning your ideas into marketable products.



## Catalyze your manufacturing with our expanded commercial enzymes portfolio

You need scalable products that are consistent and reproducible – regardless of quantity. We offer an expanded portfolio with a wide variety of enzymes for commercial molecular biology products. Customize features, change concentrations and

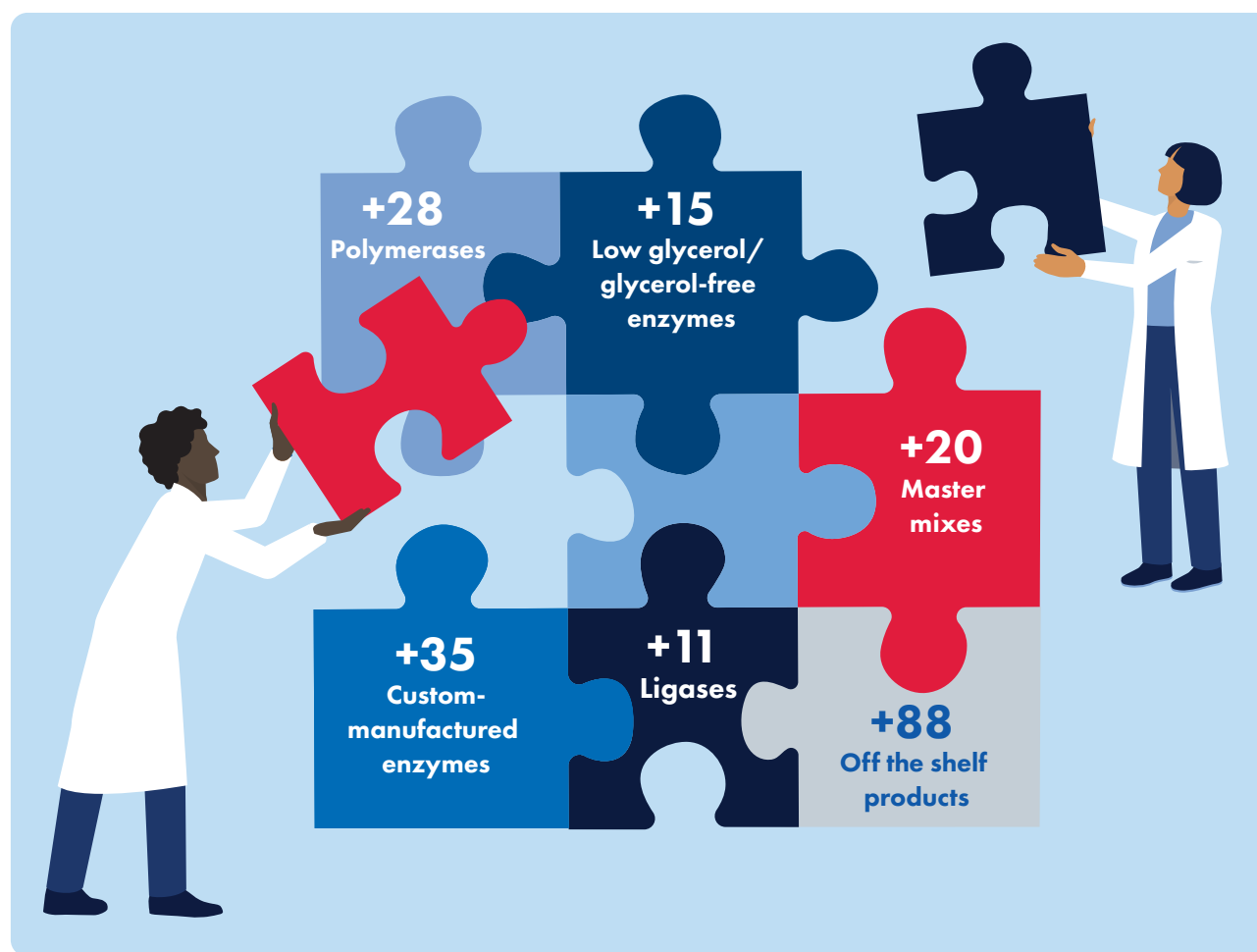
adjust filling volumes and packaging the way that you want it. We are the leading enzyme supplier to major NGS providers worldwide and are proud to now be able to offer even more enzymes to meet your growing needs.

## Multi-column purification

Offer your customers high-quality enzymes produced in ISO-certified facilities. Our purification process provides the utmost purity and includes up

to eight columns. Enzymes are available as solutions, lyophilized, lyo-ready or in glycerol-free formulations.

## cGMP/QSR and ISO certified enzymes



## Available enzymes and applications

| Types of enzymes                  | Applications (examples)                                                                                                                      | Products (examples)                                                                                                                                                                                                                                                |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NGS mixes for library preparation | DNA/RNA-seq, DNA library prep, or SMART-type of RNA-seq, NGS adapter ligation, 3' end labeling, phosphorylation of 5' ends prior to ligation | 5X ER/A-Tailing Enzyme Mix, WGS Ligase, 5X WGS Fragmentation Mix, End-Repair Mix High Concentration                                                                                                                                                                |
| DNA polymerase                    | qPCR, multiplex PCR, high fidelity PCR, GC-rich PCR, isothermal amplification, next-generation sequencing (NGS)                              | QuantiNova® DNA Polymerases, Hot-Start Taq Polymerases, Taq-B DNA Polymerase, High-Fidelity DNA Polymerases; Isothermal Polymerases, Terminal Deoxynucleotidyl Transferase (TdT), Ultra Clean Production (UCP) Taq DNA Polymerases, Stoffel DNA Polymerases        |
| RNA polymerase                    | In vitro mRNA synthesis, RNA therapeutics                                                                                                    | T7 RNA Polymerase, Poly(A) Polymerase                                                                                                                                                                                                                              |
| Reverse transcription enzymes     | cDNA synthesis, RT-PCR, one-step qRT-PCR, RNA-Seq                                                                                            | StableScript®, Omniscript®, Sensiscript®, EnzScript™, M-MuLV Reverse Transcriptase, HotStartRT-Script (in QuantiNova product line), Reverse Transcriptase Lyo                                                                                                      |
| Modifying enzymes                 | Cloning, restriction digestion, NGS library prep, DNA repair prior to PCR                                                                    | DpnI, Exonuclease I, III, V, VII and Lambda Exonuclease, E. coli Pyrophosphatase, 2-O Methyltransferase, Proteinase K, Proteinase K Ultrapure, RNase H, RNase H MBG, RNase A MBG, T4 Polynucleotide Kinase (PnK), UDGase, DNase I, dsDNase, dsDNase HL, Saltonase® |
| Binding proteins                  | Primer sequestering, enhancing cDNA synthesis, mutagenesis or affinity capture of cDNA                                                       | E. coli Single-Stranded DNA Binding Protein, E. coli Single-Stranded DNA Binding Protein, T4 Gene 32 Protein, RecA                                                                                                                                                 |
| Ligases                           | Cloning, NGS library prep, labeling, nick repair                                                                                             | T4 DNA Ligase, T4 DNA Ligase MBG, E. coli DNA Ligase, T3 DNA Ligase, T7 DNA Ligase, Taq DNA Ligase, T4 RNA Ligase 1 and 2, Tth DNA Ligase                                                                                                                          |
| Inhibitors                        | RNase inhibition, Blockage of PCR inhibitors                                                                                                 | RNase Inhibitor Hu, PCR Anti-Inhibitor                                                                                                                                                                                                                             |



For more information about OEM commercial enzymes, scan this QR code ([www.qiagen.com/oem-enzymes](http://www.qiagen.com/oem-enzymes)).

## PCR master mixes – turn innovations into products

Choose from the huge variety of kits and master mixes in our expanded portfolio that can be used in most commercially available instruments for various applications such as PCR, qPCR, RT-PCR, digital PCR, NGS, epigenetics and PCR array analysis.



Our QuantiNova® master mix products, with their color-changing pipetting-control feature, showcase how we can support you in driving innovation. Master mixes are available in solution, lyophilized, lyo-ready, or glycerol-free forms. Our smooth supply chain operations enable bulk deliveries, anywhere in the world.

|                            | Applications (examples)                                                             | Products (examples)                                                                                                                                                                                                                                                                                             |
|----------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Qualitative end-point PCR  | Genotyping PCR, genetic analysis, cloning, STR and microsatellite analysis          | AllTaq™ Master Mix, AllTaq PCR Core Kits, QIAGEN Multiplex PCR Kits, UCP Multiplex PCR Kit, HotStarTaq Master mix Kits, TaqNova Master Mix 2X                                                                                                                                                                   |
|                            | Long-range PCR                                                                      | UltraRun Long Range PCR Kit                                                                                                                                                                                                                                                                                     |
|                            | HiFidelity PCR, NGS                                                                 | UCP HiFidelity PCR Kit, HiFi PCR Master mix                                                                                                                                                                                                                                                                     |
|                            | Microbial testing, microbiome/ metagenome analysis, genotyping and genetic testing  | UCP Multiplex PCR Kit, UCP HiFidelity PCR Kit                                                                                                                                                                                                                                                                   |
| Quantitative real-time PCR | Gene expression analysis, two-step real-time PCR, real-time PCR arrays              | QuantiNova SYBR® Green PCR Kit, QuantiNova Probe PCR Kit; UCP SYBR® Green PCR Kit, UCP Probe PCR Kit, qPCR SG Mix, qPCR Mix ROX, qPCR Probe Mix, qPCR Probe Mix ROX                                                                                                                                             |
|                            | RT-PCR, one-step RT-PCR                                                             | QuantiNova Pathogen Kit, QuantiNova Reverse Transcription Kit, QIAGEN One Step Ahead RT-PCR Kit, QuantiNova Multiplex RT-PCR Kit, Omniscript, Sensiscript, ZipScript One-Step RT-qPCR, StableScript One Step RT-qPCR Kit, One-Step Probe RT-qPCR Mix, One-Step Probe RT-qPCR Mix ROX, Reverse Transcriptase Kit |
|                            | Multiplex PCR                                                                       | QuantiNova Multiplex PCR Kit, QuantiNova Multiplex RT-PCR Kit                                                                                                                                                                                                                                                   |
|                            | Epigenetics, multiple displacement amplification analysis, DNA methylation analysis | EpiTect® MethyLight PCR Kits                                                                                                                                                                                                                                                                                    |



For more information about OEM PCR master mixes, scan this QR code ([www.qiagen.com/oem-mm](http://www.qiagen.com/oem-mm)).



"Make no  
compromises  
on quality  
when scaling  
up your  
production."

## Oligonucleotides – high quality assured

Our high-purity oligos are produced using AIE-HPLC and RP-HPLC methods with critical raw materials tested and approved before production for lot-to-lot reproducibility. Synthesis processes meet the stringent requirements of the diagnostic field and cGMP/QSR guidelines, providing full traceability with extensive Production Batch Records. Our portfolio includes primers and probes that support SARS-CoV-2 virus detection. Current customers include many leading IVD companies, worldwide.

### Purity

Primers:  
**up to 95%**

Probes:  
**99%**

Scorpions®:  
**95%**

NGS adapters:  
**up to 95**

### Oligonucleotides types and quality levels

|                               | Fast track             | Development-LC                        | Development-HPLC                      | IVD                                            |
|-------------------------------|------------------------|---------------------------------------|---------------------------------------|------------------------------------------------|
| Traceability                  | None                   | Partial                               | Partial                               | Full                                           |
| Purification                  | LC/HPLC                | LC                                    | HPLC                                  | HPLC                                           |
| HPLC column                   | Non dedicated          | N/A                                   | Non dedicated                         | Dedicated                                      |
| Cleanroom                     | None                   | Optional                              | Optional                              | Dedicated                                      |
| Quality regulations           | ISO9001                | ISO9001<br>ISO13485                   | ISO9001<br>ISO13485                   | ISO9001<br>ISO13485<br>21 CFR Part 820<br>cGMP |
| QC control                    | Optional QC            | Optional QC                           | Customized QC                         | In process, Final                              |
| Product release               | Final QC               | Technical release                     | Technical release                     | QA release                                     |
| Documents provided            | Compilation of results | Simplified CoA                        | Simplified CoA                        | Full CoA                                       |
| Critical raw material control | Partial                | Partial                               | Partial                               | Full                                           |
| Environmental control         | Yes                    | Yes                                   | Yes                                   | Yes                                            |
| Manufacturing documents       | None                   | Simplified Production<br>Batch Record | Simplified Production<br>Batch Record | Production Batch Record                        |
| Synthesis scale               | 0.04–0.1 µmol          | 0.15–60 µmol                          | 1–60 µmol                             | 1–60 µmol                                      |



“Reduce investment costs and get your product to the market faster.”



## Oligonucleotides for molecular and in vitro diagnostic applications

### Oligo categories

- Primers
- Probes
- Scorpions
- Locked Nucleic Acid (LNA®)
- NGS adapters

#### Unmodified oligos

- Unmodified oligonucleotides up to 170 bp
- Homopolymers such as polyA and polyT

### Modified oligos

- Fluorescent groups
- Fluorescent groups combined with quenchers
- LNA-containing oligonucleotides
- MGB-Eclipse® Dark Quencher
- EBQ
- Superbases
  - SuperA®, SuperG® and SuperT®
- Biotin
- Phosphate
- Spacers
- Amino
- Others

### Oligo customization

- Formulation options
  - Buffer
  - Nuclease-free water
  - Lyophilization
- Aliquotation
  - Bulk
  - Mix and aliquots
  - Plates
- Chemical stability studies

### Oligo OEM offerings

- Custom formulation
- Custom or QIAGEN labeling
- QC support
- Consulting service
- Fast-track product line
- Make to stock approach (SUMACO),  
for lower lead times, flexible manufacturing  
and delivery schedules



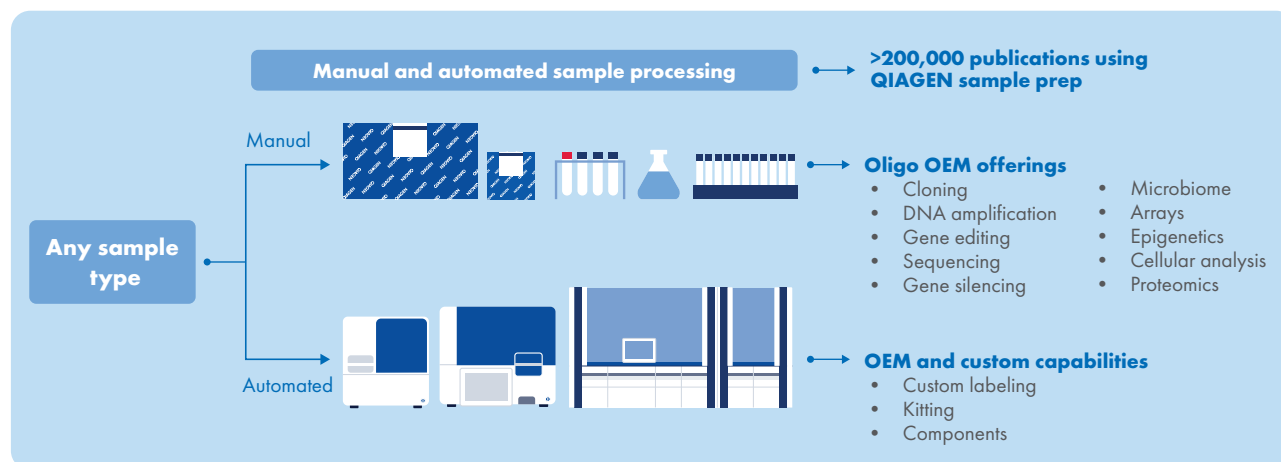
For more information about oligonucleotides, scan this QR code ([www.qiagen.com/oem-oligos](http://www.qiagen.com/oem-oligos)).

## Nucleic acid purification – work with the kit experts

Turn your breakthroughs into valued products with access to our trusted chemistries and established, compliant protocols. Gain a competitive advantage with the latest purification methods and automated processes. We supply an immense variety of sample processing products to companies in life sciences, molecular diagnosis, applied testing (veterinary and food), forensics, microbiome and more. Customers around the world know and trust QIAGEN as the gold standard of nucleic acid purification.



## Purification for the complete spectrum of biological samples



### Available from our DNA/RNA purification portfolio

#### Sample types include:

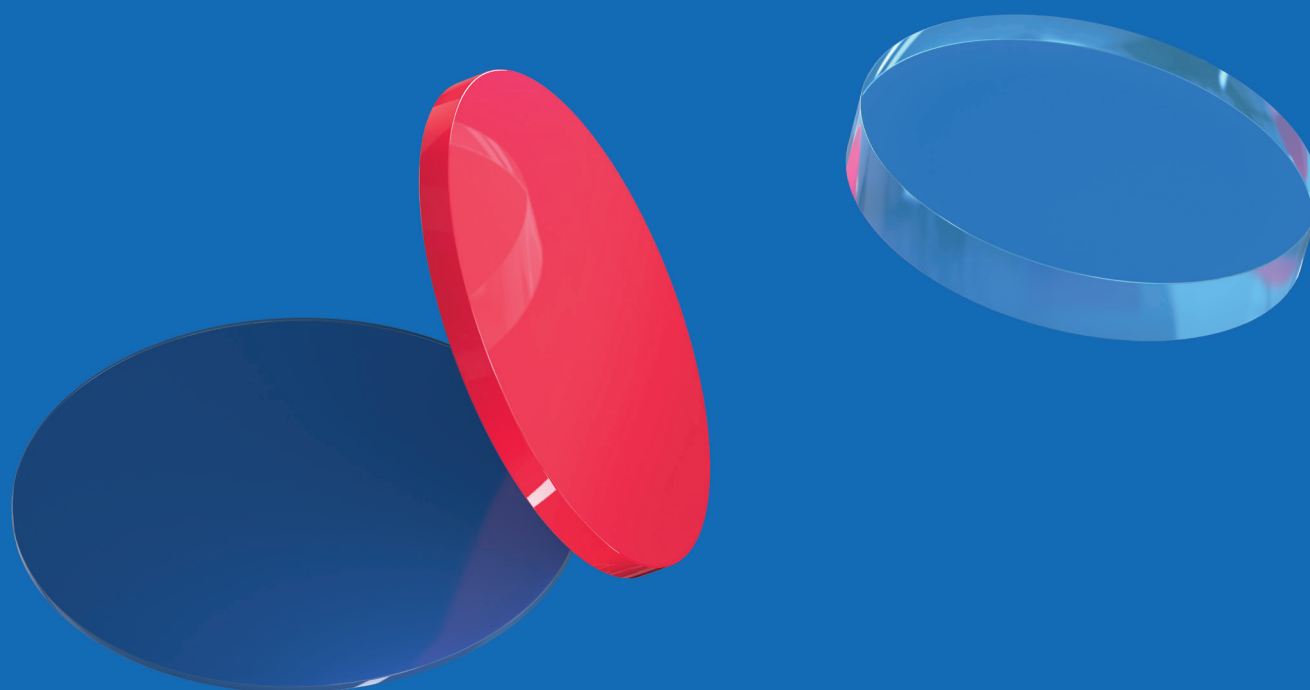
- Human, animal or plant tissue
- Blood, urine and other body fluids
- FFPE
- Forensic specimen
- Circulating cell-free nucleic acid

#### Isolation methods:

- Spin column
- Magnetic beads
- Plate formats
- Manual or automated



For more information about nucleic acid purification, scan this QR code ([www.qiagen.com/oem-purification](http://www.qiagen.com/oem-purification)).



## Custom Formulations

- Tailored concentrations
- Lyophilized or lyo-ready/glycerol-free
- Buffer formulations and additives
- Customized master mixes

## Contract Bulk Manufacturing & QC

- Process development/scale-up
- Custom labeling on product
- Inventory management
- Fast-track production lines
- QC as agreed
- Traceable product batch records
- Product release

## Volume, Packaging & Shipping

- Customized volumes
- Kitting
- Custom labeling on packaging (white label/your brand)
- Packaging per specifications
- Global shipment
- Storage and shelf life
- Supermarket concept (SUMACO) inventory

## Post-launch Support

- Technical support
- QC support
- Troubleshooting
- Change control policies
- Product enhancement
- Quality at scale



For more information about OEM, scan this QR code

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit instructions for use or user operator manual. QIAGEN instructions for use and user manuals are available at [www.qiagen.com](http://www.qiagen.com) or can be requested from QIAGEN Technical Services (or your local distributor).

The QIAcuity, QIAcube Connect, EZ1, EZ2 Connect and QIASymphony are intended for molecular biology applications. These products are not intended for diagnosis, prevention or treatment of a disease.

Trademarks: QIAGEN®, Sample to Insight®, QIAcube®, QIASymphony®, Quantinova®, EZ1®, EZ2®, LNA®, MGB-Eclipse®, Omniscript®, Scorpions®, SuperA®, SuperG®, SuperT®, Superscript® (QIAGEN Group) SYBR® Green (Life Technologies Corporation). Registered names, trademarks, etc. used in this document, even when not specifically marked as such, may still be protected by law. QPRO-3285 05/2023 © QIAGEN 2023, all rights reserved.

Ordering  
Technical Support  
Website

**[oem-sales@qiagen.com](mailto:oem-sales@qiagen.com)**  
**[www.support.qiagen.com](http://www.support.qiagen.com)**  
**[www.qiagen.com/OEM](http://www.qiagen.com/OEM)**