

**GBD
Gesellschaft für
biotechnologische Diagnostik mbH**

foster quality || create certainty

customized control samples for more safety in everyday (laboratory) life

Our aspiration, our experience and our network are our strength.
Customized control samples are our focus.
Working with and for people is our passion.

PRODUCT CATALOG



GBD *mbH*



Challenge

Infectious diseases remain a global health challenge, requiring fast and precise diagnostics for early detection and effective outbreak control.



Competence

In this context precision and accuracy are essential. Quality controls function as critical verification tools, reducing analytical errors and ensuring the reliability and validity of diagnostic outcomes.



Customization

GBD is a specialized manufacturer of Internal quality control samples and external quality assessment (EQA) samples supporting laboratories worldwide in safeguarding diagnostic accuracy and process integrity.

Our product portfolio includes a wide range of tailor-made samples, reference materials, and control specimens covering various diagnostic fields.

Rather than focusing on high-volume production, we prioritize flexibility and precise customization to meet the specific needs of our clients. This approach allows us to address unique assay requirements, rare analytes, or emerging diagnostic parameters with high precision and reproducibility.

What makes them unique:



Whole workflow samples

system-agnostic whole-pathogen and human antibody controls (no synthetics)



Matrix properties

aligned with routine diagnostic samples, enabling true-to-life simulation



Independent & flexible

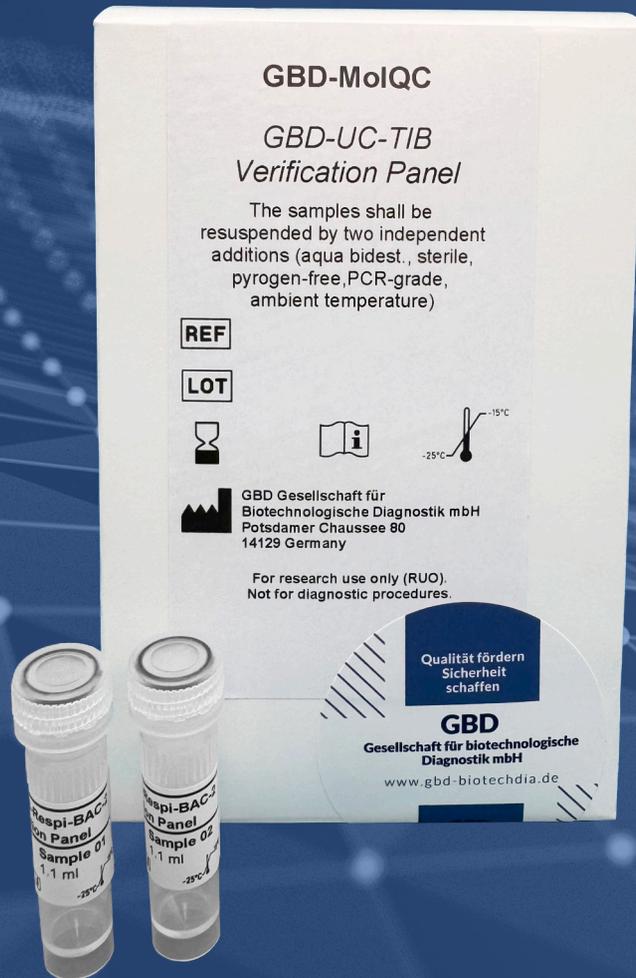
platform- and assay-independent, homogeneous and stable with a minimum of 2 years shelf life when stored at <-20°C in both small & large production batches, depending on demand



Relevant & up to date

regularly expanded with new strains and always epidemiologically relevant and science driven

GBD MoIQC



Singleplex Controls

These validation and verification panels provide essential support for implementing new tests and for quality control during routine use.

They provide well-characterized, standardized samples to evaluate sensitivity, accuracy, and reproducibility under controlled conditions.

By using defined positive and negative samples, these panels help identify potential weaknesses in assay performance early on.

GBD-MolQC

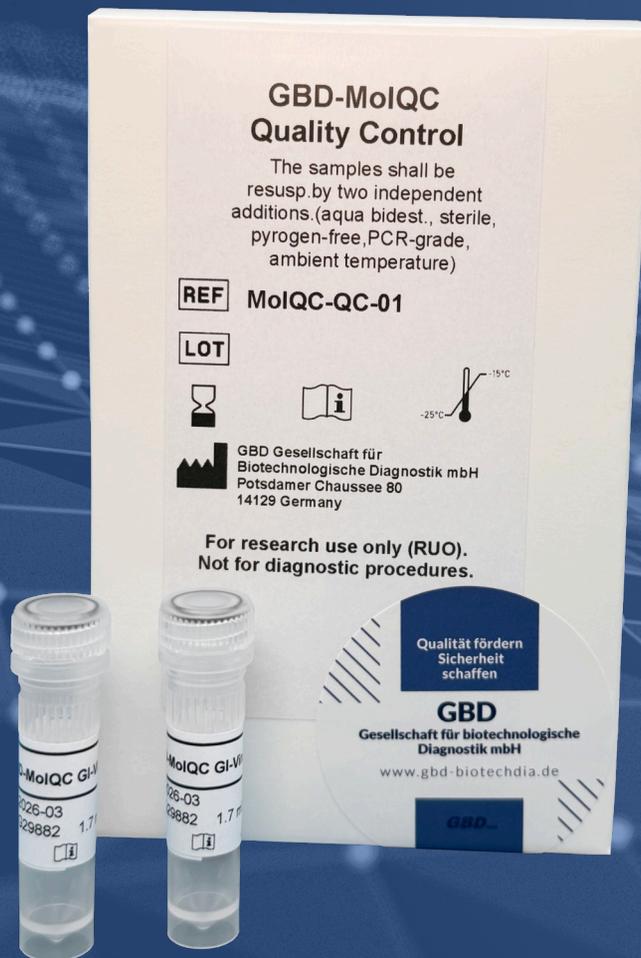
Quality Controls: Singleplex

	Product Name	Set	Product Type	Sample Property	Matrix	RG
Gastrointestinal Pathogens	GBD_UC-TIB-Gastro-BAC-1 Verification Panel <i>REF 10302941001</i>	4 x 1.1 ml	Singleplex	Sample 01: Yersinia enterocolitica Sample 02: Campylobacter jejuni Sample 03: Salmonella enteritidis Sample 04: Shigella sonnei	Bacteria suspension	1
	GBD_UC-TIB-EHEC/C.diff Verification Panel <i>REF 10302950001</i>	4 x 1.1 ml	Singleplex	Sample 01: EPEC (eae positive) Sample 02: EHEC (stx1 positive) Sample 03: EHEC (stx2 positive) Sample 04: C. difficile (Toxin B positive)	Bacteria suspension	1
	GBD_UC-TIB-Gastro-Virus Verification Panel <i>REF 10302968001</i>	5 x 1.1 ml	Singleplex	Sample 01: Norovirus GGI Sample 02: Norovirus GGII Sample 03: Rotavirus G1P[8] Sample 04: Adenovirus F Sample 05: Astrovirus	Stool suspension	2
	GBD_UC-TIB-Gastro-Virus-2 Verification Panel <i>REF TBA</i>	4 x 1.1 ml	Singleplex	Sample 01: Sapovirus Sample 02: humanes Parechovirus Sample 03: Coxsackievirus A21 Sample 04: Astrovirus	Stool suspension/ Cell culture supernatant	2
	GBD_UC-TIB-Gastro-Ecoli Verification Panel <i>REF TBA</i>	4 x 1.1 ml	Singleplex	Sample 01: EHEC (stx2/eae positive) Sample 02: EAEC (aatA/aggR positive) Sample 03: ETEC (eltB positive) Sample 04: ETEC (estA positive)	Bacteria suspension	1
Respiratory Pathogens	GBD_UC-TIB-Respi-BAC-1 Verification Panel <i>REF 10379065001</i>	4 x 1.1 ml	Singleplex	Sample 01: Streptococcus pneumoniae Sample 02: Bordetella pertussis Sample 03: Bordetella parapertussis Sample 04: Haemophilus influenzae	Bacteria suspension	1
	GBD_UC-TIB-Respi-BAC-2 Verification Panel <i>REF 10379090001</i>	3 x 1.1 ml	Singleplex	Sample 01: Legionella pneumophila Sample 02: Chlamydia pneumoniae DNA Sample 03: Mycoplasma pneumoniae DNA	Bacteria suspension	1
Blood Relevant	GBD-MolQC Blood Borne Panel Virus 1 <i>REF MolQC-BBV1-01</i>	12 x 1.5 ml	Singleplex	Sample 01: HIV-1 High Control Sample 02: HIV-1 Low Control Sample 03: Hepatitis B Virus High Control Sample 04: Hepatitis B Virus Low Control Sample 05: Hepatitis C Virus High Control Sample 06: Hepatitis C Virus Low Control	Plasma	1 1 3** 3** 3** 3**
	GBD-MolQC HCV Whole Blood Panel 1 <i>MolQC-HCVWB1-01</i>	2 x 0.3 ml 2 x 0.4 ml	Singleplex	Sample 01: HCV positive Sample 02: HCV negative Aqua bidest	Whole blood suspension/ Water	3** 1 1

All samples are:

- lyophilized, homogenous + stable
- in RUO status

GBD MoIQC



Multiplex Controls

Designed to support targeted multi-pathogen test setups, monitor instrument performance, and ensure consistent system performance.

Broad range of gastrointestinal, sexually transmitted, and respiratory pathogens available.

The multiplex design allows highly efficient testing by combining multiple targets in a single run, saving both time and costs.

GBD-MolQC

Quality Controls: Multiplex

	Product Name	Set	Product Type	Sample Property	Matrix	RG
Gastrointestinal Pathogens	GBD-MolQC GI-Virus 1 <i>REF MolQC-GV1-01</i>	2 x 1.7 ml	Multiplex	Norovirus GG1 Norovirus GG2 Rotavirus Adenovirus F40/41 Astrovirus	Stool suspension	2
	GBD-MolQC GI-Virus 2 <i>REF MolQC-GV2-01</i>	2 x 1.7 ml	Multiplex	Norovirus GG1 Norovirus GG2 Rotavirus Adenovirus F40/41 Astrovirus Sapovirus	Stool suspension	2
	GBD-MolQC GI-Bacteria 1 <i>REF MolQC-GB1-01</i>	2 x 1.7 ml	Multiplex	Yersinia enterocolitica Campylobacter jejuni Salmonella enteritidis Shigella sonnei	Bacteria suspension	1
	GBD-MolQC GI-Bacteria 2 <i>REF MolQC-GB2-01</i>	2 x 1.7 ml	Multiplex	EPEC (eae positive) EHEC (stx1 positive) EHEC (stx2 positive) C. difficile (Toxin B positive)	Bacteria suspension	1
	GBD-MolQC GI-Bacteria 3 <i>REF MolQC-GB3-01</i>	2 x 1.7 ml	Multiplex	Campylobacter jejuni Clostridium difficile E. coli O157/STEC Salmonella enteritidis EIEC Yersinia enterocolitica	Bacteria suspension	1
Respiratory Pathogens	GBD-MolQC Respi-Virus 1 <i>REF MolQC-RV1-01</i>	2 x 1.3 ml	Multiplex	Influenza A-Virus (H3N2) Influenza B-Virus RSV B SARS-CoV-2	Cell culture supernatant	2
	GBD-MolQC Respi-Virus 2 <i>REF MolQC-RV2-01</i>	2 x 1.3 ml	Multiplex	Adenovirus Parainfluenzavirus Humanes Rhinovirus Humanes Metapneumovirus	Cell culture supernatant	2
	GBD-MolQC Respi-Bacteria 1 <i>REF MolQC-RB1-01</i>	2x 1.3 ml	Multiplex	Streptococcus pneumoniae Bordetella parapertussis Bordetella pertussis Haemophilus influenzae	Bacteria suspension	1
	GBD-MolQC Respi-Bacteria 2 <i>REF MolQC-RB2-01</i>	2x 1.3 ml	Multiplex	Chlamydophila pneumoniae Legionella pneumophila Mycoplasma pneumoniae	Bacteria suspension	1

All samples are:
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- in RUO status

GBD-MolQC

Quality Controls: Multiplex

	Product Name	Set	Product Type	Sample Property	Matrix	RG
STI	GBD-MolQC STI-Bacteria 1 <i>REF MolQC-STB1-01</i>	2 x 1.3 ml	Multiplex	Chlamydia trachomatis D Neisseria gonorrhoeae Trichomonas vaginalis Mycoplasma genitalium (DNA)	Bacteria suspension	1
Trop.	GBD-MolQC TropF-Virus 1 <i>REF MolQC-TFV1-01</i>	2 x 1.3 ml	Multiplex	Chikungunya Virus Dengue Virus West Nile Virus Zika Virus	Plasma	1
CNS	GBD-MolQC STI/CNS Virus 1 <i>REF MolQC-STCNV1-01</i>	2 x 1.3 ml	Multiplex	Cytomegalovirus Herpes Simplex Virus 1 Varizella Zoster Virus	Cell culture supernatant	2

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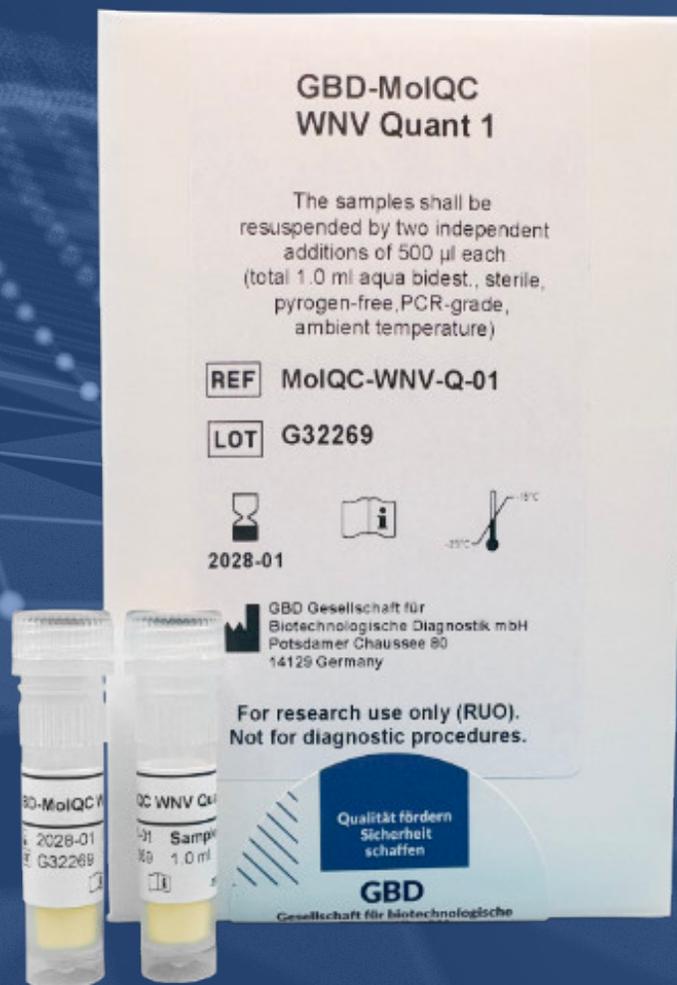
GBD MolQC samples (RUO)

Designed to meet the highest standards in diagnostics!

- ✓ replicates the workflow of a laboratory
- ✓ mimics clinical samples (system-agnostic, whole pathogens)
- ✓ ideal for staff training
- ✓ can be used to check assays and devices
- ✓ ideal for verification of assays



GBD MoIQC



Quantitative Controls

In the case of viruses that continue to spread in certain regions and are relevant to blood donation (such as West Nile virus), it is particularly important that the tests are highly sensitive.

To support laboratories in this regard, we produce samples that we quantify using dPCR.

GBD-MolQC

Quality Controls:
Quantitative

Product Name	Set	Product Type	Sample Property	Matrix	RG
GBD-MolQC West Nile Virus Quant 1 <small>REF MolQC-WNV-Q-01</small>	2 x 1.0 ml	Singleplex	Sample 01: West Nile virus lineage 1 119000 +- 6000 c/ml Sample 02: West Nile virus lineage 2 111000 +- 7000 c/ml	Plasma	1

All samples are:

- lyophilized, homogenous + stable
- in RUO status

GBD-MolQC West Nile Virus Quant 1 is the newest addition to our portfolio. To stay updated on our ever growing product lineup consider visiting:

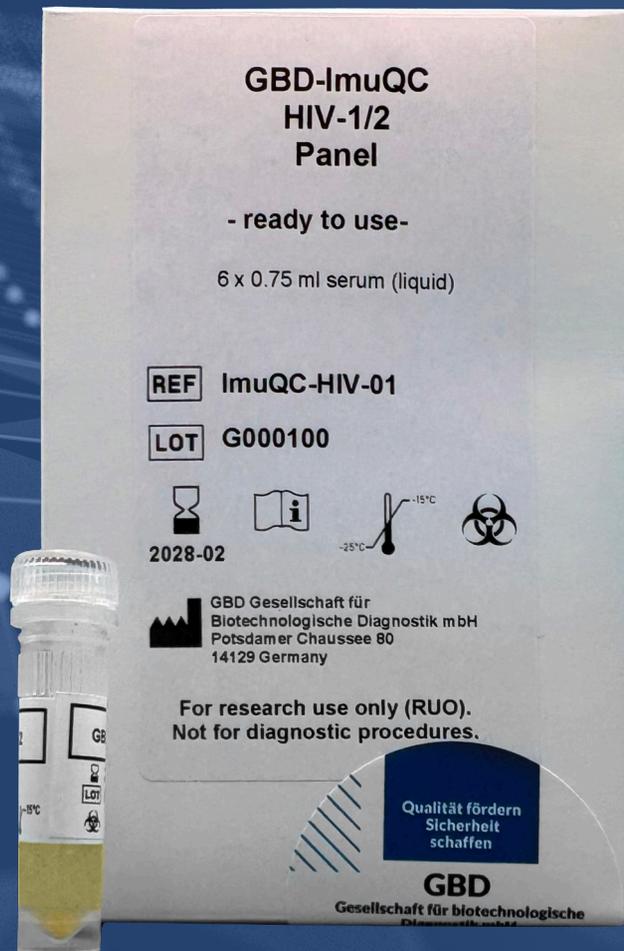
Product-News



Newsletter



GBD ImuQC



Immunology Controls

A selection of serological parameters, fully covering various infection profiles to confirm routine detection is performing as intended.

These samples help assuring quality when determining antibodies and antigens for the immunology of HIV, Hepatitis, CMV and Hanta.

GBD-ImuQC

Quality Controls

Serological Infection Diagnostics

Product Name	Set	Product Type	Sample Property	Matrix	RG
GBD-ImuQC HIV-1/2 Panel 1 <i>ImuQC-HIV-01</i>	6 x 0.75 ml	Singleplex	Sample 01: Anti-HIV-1 positive Sample 02: Anti-HIV-2 positive Sample 03: Anti-HIV-1/2 negative	Serum	3** 3** 1
GBD-ImuQC HIVp24 quant Panel 1 <i>ImuQC-HIVp24-01</i>	6 x 0.75 ml	Singleplex	Sample 01: HIV-1 p24 Ag High positive Sample 02: HIV-1 p24 Ag Low positive Sample 03: HIV-1 p24 Ag negative	Serum	1
GBD-ImuQC HAV Panel 1 <i>ImuQC-HAV1-01</i>	4 x 0.5 ml	Singleplex	Sample 01: Hepatitis A Virus (HAV) IgG positive Sample 02: Hepatitis A Virus (HAV) (Ab) negative	Serum	1
GBD-ImuQC Anti-HBs quant Panel 1 <i>ImuQC-AHBs-01</i>	6 x 0.75 ml	Singleplex	Sample 01: Anti-HBs High positive Sample 02: Anti-HBs Low positive Sample 03: Anti-HBs negative	Serum	1
GBD-ImuQC HCV Panel 1 <i>ImuQC-HCV1-01</i>	4 x 0.5 ml	Singleplex	Sample 01: Hepatitis C Virus (HCV) (Ab) pos. Sample 02: Hepatitis C Virus (HCV) (Ab/Ag) neg.	Serum	1
GBD-ImuQC CMV Panel 1 <i>ImuQC-CMV1-01</i>	4 x 0.5 ml	Singleplex	Sample 01: Cytomegalovirus (CMV) IgG pos. Sample 02: Cytomegalovirus (CMV) (Ab) neg.	Serum	1
GBD-ImuQC DOBV Panel 1 <i>ImuQC-DOBV-01</i>	6 x 0.5 ml	Singleplex	Sample 01: Hantavirus (DOBV), acute Infection Sample 02: Hantavirus (DOBV), past Infection Sample 03: Hantavirus (Ab) negative	Serum	1
GBD-ImuQC PUUV Panel 1 <i>ImuQC-PUUV-01</i>	6 x 0.5 ml	Singleplex	Sample 01: Hantavirus (PUUV), acute Infection Sample 02: Hantavirus (PUUV), past Infection Sample 03: Hantavirus (Ab) negative	Serum	1

All samples are:

- liquid, homogenous + stable
- in RUO status



CUSTOM-MADE SAMPLES

External Quality Assessment samples

With more than 35 years of experience in the production of EQA samples for diagnostics of infectious diseases, we are able to produce samples from a wide range of pathogens. For example, we can produce samples in virology from A for Adenovirus to Z for Zika virus according to specific requirements in terms of quantity and composition.

On demand RUO samples

Are you looking for samples for your individual application, whether it be a research project or for quality assurance when introducing a new test? We can produce the sample you need from a wide range of pathogens and antibodies.



More Information Online



Customized Quality Controls

Our aspiration, our experience and our network are our strength!

Would you like to improve processes, train your team or do you need to validate tests?

Are you missing the right sample?

Call us:
+49 (0)30 688 19 77 30



GBD *mbH*



Quality

We guarantee the highest quality of our samples through a multitude of test stages, complex production processes, a high level of expertise coupled with decades of experience and passion. We are committed to transparent processes and personal communication.



Flexibility

A broad collection of raw materials, many years of experience, a good network and our strong team enable us to produce customized samples, even in small batches, while responding to the needs of each customer.



Scientificity

Our vision is to make a contribution to stable and safe basic medical care. We operate in a diverse scientific network and exchange. Our samples are always adapted to the current clinical/epidemiological situation.

Reliability and Quality

GBD Gesellschaft für biotechnologische Diagnostik mbH is an internationally active company which, as a virological-scientific institute, specializes in the production of tailor-made quality control samples for pathogen diagnostics and other areas of laboratory diagnostics. The collection of source material, the planning and production of samples as well as the data evaluation is carried out in-house in cooperation with many experts.

With our products you will find:

1

Variety

Large, constantly growing collection of materials (at least 90 different pathogens/antibodies).

3

Stability

Our homogeneous samples can be used for several days. Shelf life (stored <-20°C) at least 2 years.

2

Individuality

We offer customized samples - tailored to your test, your question or your project.

4

Independency

Our "third party" control samples can be integrated into your workflow independently of the platform or made available to your customers.



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