



GBC General
Biologicals
Corporation

GBC AIO M160
All-in-One Molecular System

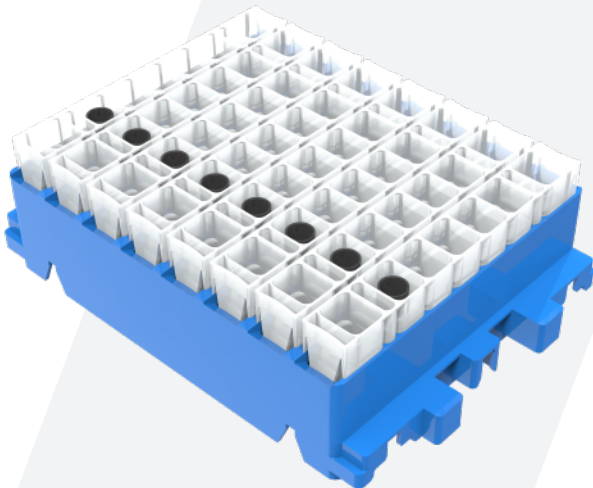
Full Automation

Less than 2 hours from sample to result.
Turnkey walk-away platform.
Prefilled proprietary extraction plates.
For liquid PCR master mix.
Intuitive and easy-to-operate user interface.
Different data transfer options(LIS) available.
Small footprint.



PCR set-up cartridges

Provides reagents and plastic consumables needed for sample processing.
Holds the liquid PCR master-mix.
PCR reaction tube & cap, and tip for liquid transfer readily available for automated processing.
Waste reduction due to thought-through and efficient concept.



Pre-filled extraction plates

For processing up to 16 samples/run. (2 plates)
Provides all necessary for contamination-free extraction.
Residual eluate can be stored for additional downstream applications.
Contains the magnetic rod cover and store it after use, for safe waste disposal.



Works with GB RealQuant HBV, HCV, and HPV Real-Time PCR kits

PCR modules with 5 detection channels are available, for maximum flexibility in building your optimal platform.

Liquid handling module

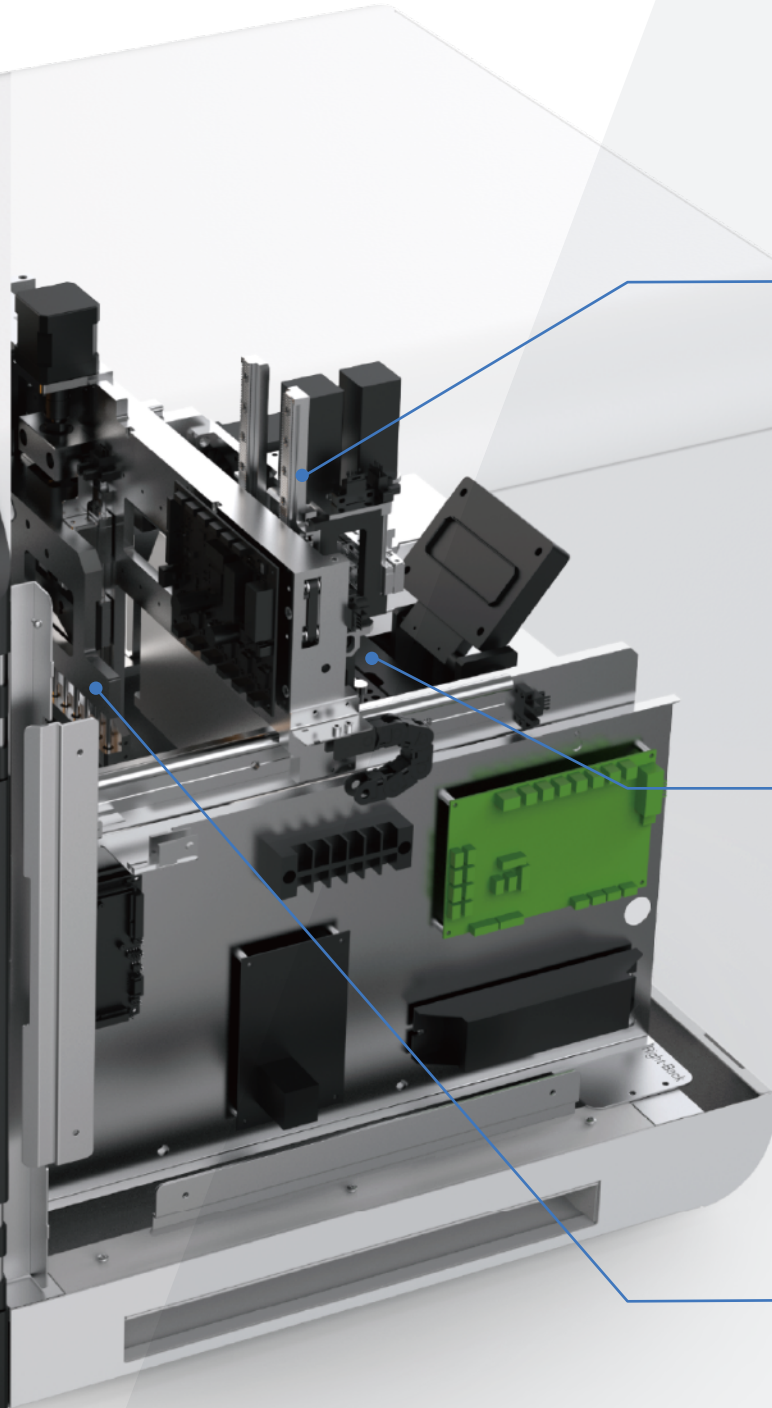
For rapid sample and eluate transfer.
Performs preparation of PCR reaction mix.
Unique design enables capping and transfer of PCR reaction tubes to PCR module.

qPCR module

5-channel qPCR for up to 16 samples/run.
Provides fast cycling capability for results in less than 40 minutes.
(dependent on assay used)

Extraction module

Two 8-magnetic-rod arms for processing magnetic bead based extraction.
Fast and contamination-free nucleic acid extraction in 10 - 40 minutes.
(dependent on protocol)



Simplify your Lab Workflow

The GBC AIO M160 System consolidates extraction, amplification and detection in one easy-to-use integrated instrument, providing fast and reliable results with high flexibility. A wide range of design options for individualized requirements are available on request.

Specifications

Extraction module

Sample capacity	1-16 samples / run
Sample input volume	50 - 300 µL
Elution volume	50 - 200 µL
Extraction time	10-40 minutes / run (dependent on protocol used)
Magnetic beads recovery rate	≥ 98%
UV decontamination	Built-in

Liquid handling module

Pipetting volume	10-200 µL
Pipetting accuracy	10 µL < 5% 200 µL < 1%

qPCR module

Sample input volume	10 - 50 µL
Reaction temperature	40 - 99 °C
Light source	High-Brightness LED, 5-channels
Excitation wavelength	470 nm - 670 nm (± 10 nm) [FAM, HEX/VIC, ROX, CY5.5]
Detection wavelength	520 nm - 710 nm (± 10 nm) [FAM, HEX/VIC, ROX, CY5.5]

Platform dimensions

Dimensions (W x D x H)	610 x 670 x 660 mm
Weight	76 kg

Choose from a wide range of extraction consumables for optimal DNA and RNA extraction results from your specific sample types.



Sample type	DNA Kit	Virus DNA/RNA Universal Kit	Virus DNA/RNA Respi Kit	Cell-free DNA Kit
Whole blood	●			
Buffy coat, Bone marrow	●			
Culture cells	●+			
Animal tissue	●+			
FFPE tissue	●‡			
Plasma / Serum / CSF	●+ ◆++	■		★
Swabs	●+ ◆++	■	■	
Liquid transport media	●+ ◆++	■	■	
Sputum / BAL	●+ ◆++	■	■	
Stool	●- ◆-			
Bacterial culture	◆++			
Forensic and Human Identity samples	●+			
Dried blood spot	○+			
Saliva and Mouth wash	●+	■	■	
Buccal cells	●+			
CVS (Chorionic villus samples)	●+			
FNA (Fine needle aspirates)	●+			
Laser micro-dissected tissue	●+			

- Genomic DNA
- Virus Nucleic Acid
- ◆ Bacterial/Parasite DNA
- ★ Circulating DNA
- Compatible Kit

- + With Tissue Lysis Buffer
- ++ With Bacteria Lysis Buffer
- ‡ With FFPET Lysis Buffer
- With Stool Lysis Buffer

Platform Loading

Extraction

PCR Set-up

qPCR Run

Scan kit barcodes & sample IDs
Load consumables & samples
5-8 minutes hands-on

Fully automated processing and analysis
Results in 1-2 hours, dependent on protocols

START

Extraction Set-Up

Lot#	Sample#	Master Mix QS	Master Mix Sample	Per Test	Total Volume
P20240111	3	30µL	30µL	270µL	180µL
Q51	20000000	Q52	2000000	Q53	200000
Q54	20000	Q55	2000		

Scan PCR assay details

Scan sample IDs

Load consumables

Start run

Intuitive user interface for secure and time-saving operation

Result analysis & display

ORDERING INFORMATION:

Catalogue No.	Product
4MGAIO	GBC AIO M160

About GBC

GBC was founded in 1984 by the Taiwan Government to develop the first In-Vitro Diagnostic (IVD) HBV kit using RIA-based technology as part of Taiwan's nationwide Liver Disease Prevention Program.

GBC has since started researching and developing Hepatitis (A, B, C, D, E) and Retrovirus (HIV) across various platforms — from RIA and ELISA (Immunoassay) to Real-Time PCR (Molecular).

With an expanding range of products including Tumor markers, Fertility, Torch, and Thyroid tests, GBC now has two R&D Centers (Hsinchu, Taiwan and San Diego, USA) as well as a sales and marketing office in China. The company has also entered the consumable products market with their brand 'oh care' — a range of oral care products for infants and adults that uses the patented P113 peptide ingredient.

GBC's products have been distributed to hospitals, clinics, labs, and blood banks in more than 40 countries including Southeast Asia, the Middle East, North America, and Europe.

Reveal. Better Life.

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