



# EzMate Automated Pipetting System

Efficient Solution for qPCR Sample Preparation and Pooling of COVID-19 Detection

Blue-Ray Biotech

2020

A multi-channel pipette is shown dispensing a yellow liquid into a 96-well plate. The pipette has multiple channels, each with a tip that is currently dispensing the liquid. The liquid is a bright yellow color. The plate is clear plastic and has many wells, some of which are already filled with the same yellow liquid. The background is a soft-focus laboratory setting.

## Your Benefits

- Integrated liquid handling automation solution for COVID-19
- Fully compatible with consumables on the market

## Why us?

- Instant technical support and service
- 18 years+ industry experience

# Integrated Liquid Handling Automation Addressed to COVID-19

## SAMPLING



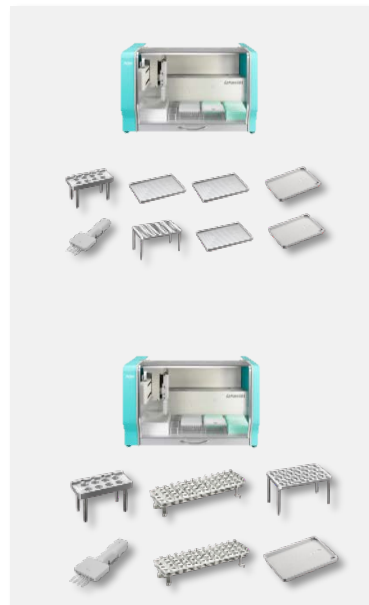
## POOLING



## NUCLEIC ACID EXTRACTION

- 1 16~32 samples in deep plate
  - 2 96 samples in deep plate
  - 3 Tube
- Fully Compatible with all consumables**

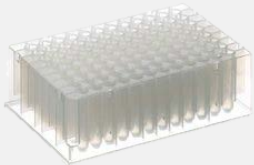
## QPCR SAMPLE PREPARATION



## QPCR DETECTION



# Compatible with a Variety of Consumables



## 16~32 samples in deep plate

- PerkinElemer chemagic Prepito
- Genolution Nextractor® NX-48S
- Zinexts ZiXpress-32



## 96 samples in deep plate

- PerkinElemer chemagic™ 360
- Roche MagMA Pure 96
- Thermo Scientific KingFisher Flex
- TANBead - Maelstrom 9600
- Bioneer Exiprep 96 Lite



## Tube

- Promega Maxwell
- QIAGEN QIAcube
- QIAGEN EZ1 Advanced
- Roche MagMA Pure Compact
- PSS magLEAD 6gC & 12gC
- Zinexts MagPurix 12 & 24
- RBC Bioscience MagCore HF16
- RBC Bioscience MagCore® Plus II

○  
SAMPLING

○  
POOLING

○  
NUCLEIC ACID  
EXTRACTION

○  
QPCR SAMPLE  
PREPARATION

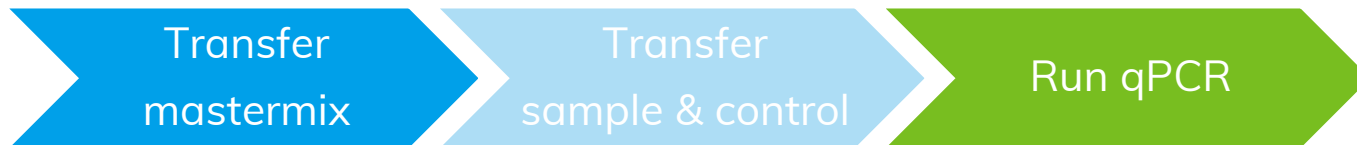
○  
QPCR  
DETECTION

## Method 1-1

# Direct Sample Preparation from Nucleic Acid Extraction System (in Plate)

# After Extraction in Plate, qPCR Sample Preparation

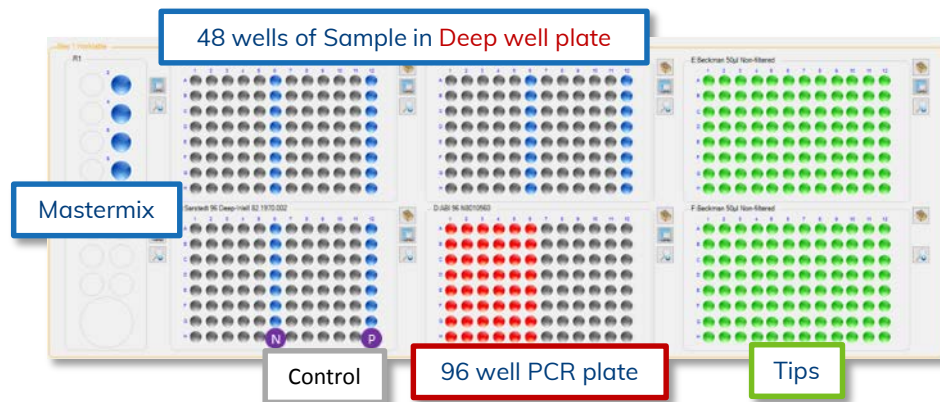
## > Workflow



- Total time < 10 mins (1 set, 48 samples)

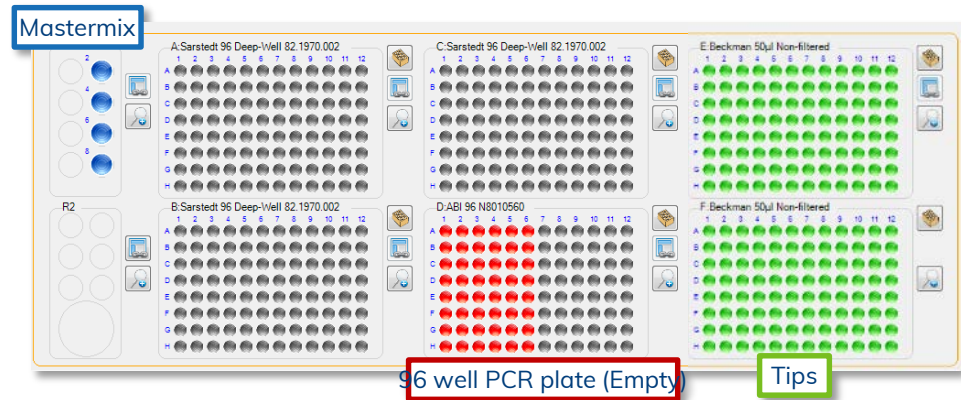
## > Materials

- EzMate 601 & 4-channel pipette module
- Deep well plate
- 96 well PCR plate
- Kit reagents and samples



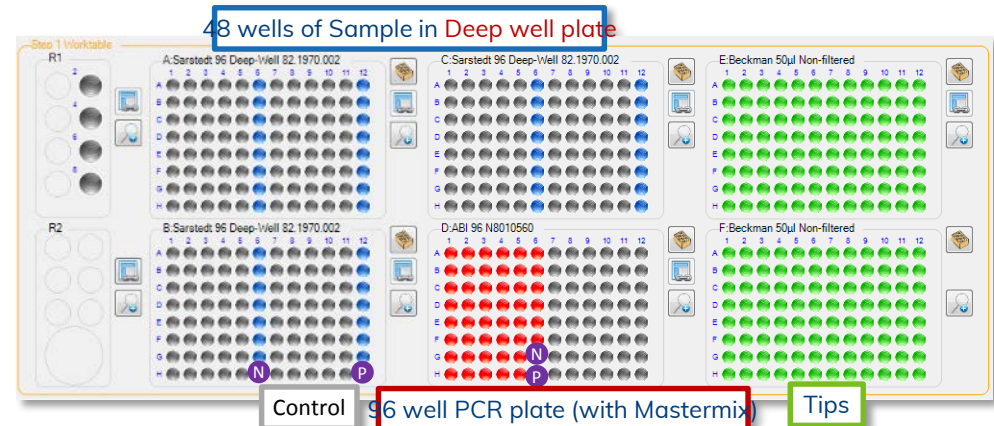
## Step 1 Transfer Mastermix

- > Transfer mastermix from 4 microcentrifuge tube to 96 well of PCR plate with EzMate 601 & 4-channel pipette module
  - Prepare mastermix by hand and separate to 4 tubes
  - Transfer mastermix from 4 tubes to 96 well PCR plate



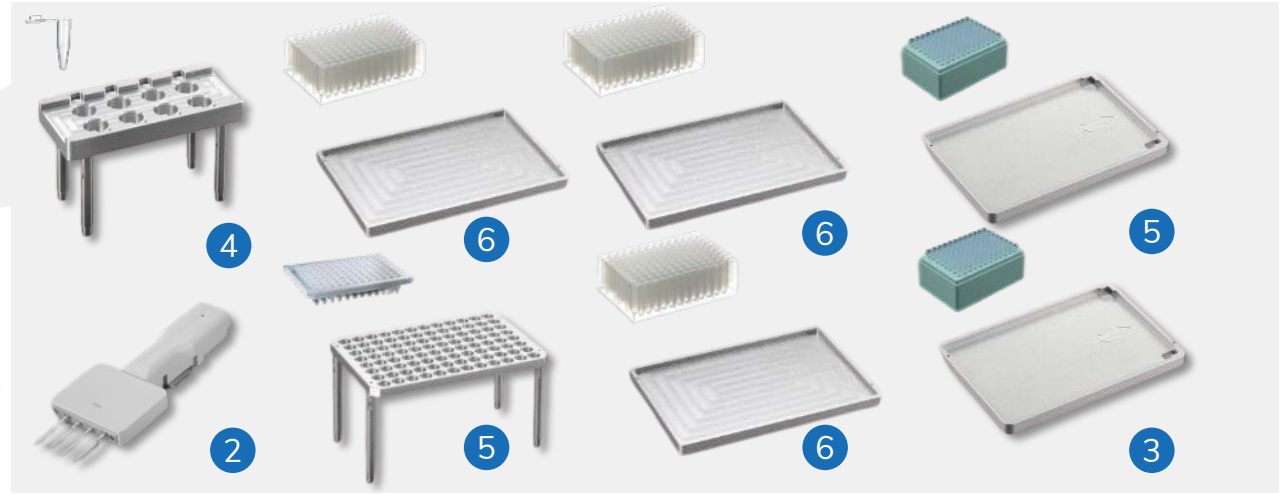
## Step 2 Transfer Samples and Control

- > Transfer 48 wells of sample (deep plate) to 96 well PCR plate with EzMate 601 & 4-channel pipette module





# Package



No	Part Number	Description	Q'TY
1	AREZ601-100000	6- position Automated Pipetting System 15.6" Notebook Computer and EzStarter™ control software	1
2	275-ezar01-01	4-channel, 50 µl Pipetting Module	1
3	275-ezar21-00	96 tips rack adapter	2
4	275-ezar26-00	4*2 1.5ml tubes adapter	1
5	275-ezar22-00	Elevated 96-well PCR plate adapter	1
6	275-ezar24-00	Deep well plate adapter	3

○  
SAMPLING

○  
POOLING

○  
NUCLEIC ACID  
EXTRACTION

○  
QPCR SAMPLE  
PREPARATION

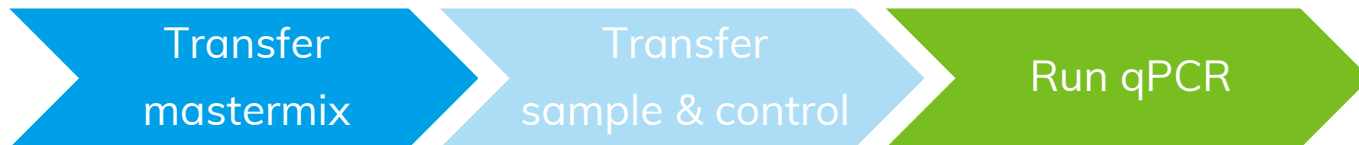
○  
QPCR  
DETECTION

## Method 1-2

# Direct Sample Preparation from Nucleic Acid Extraction System (Tube)

# After Extraction in Tube, qPCR Sample Preparation

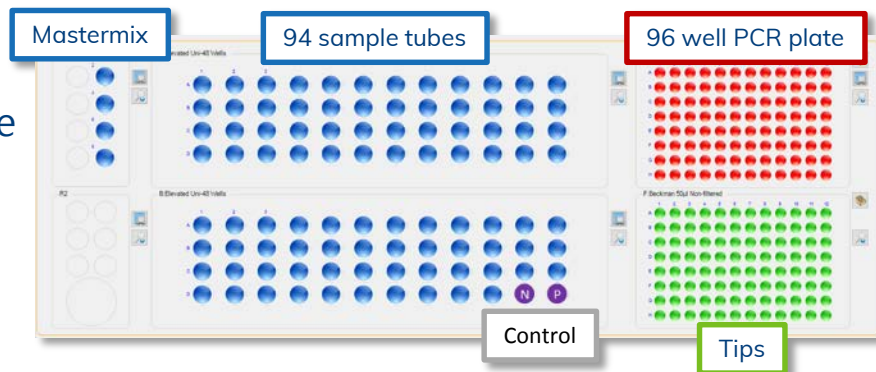
## > Workflow



- Total time < 15 mins (1 set, 96 samples)

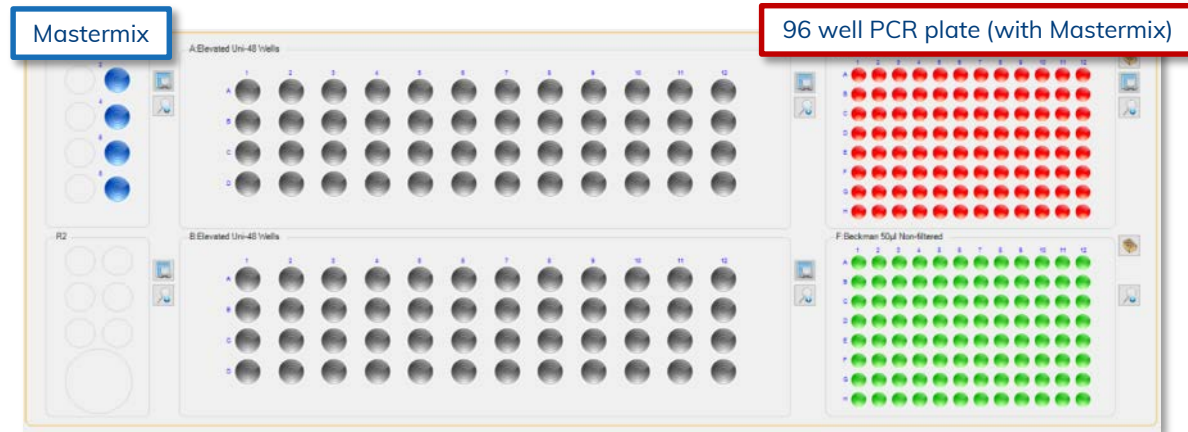
## > Materials

- EzMate 601 & 4-channel pipette module
- Deep well plate
- 96 well PCR plate
- Kit reagents and samples



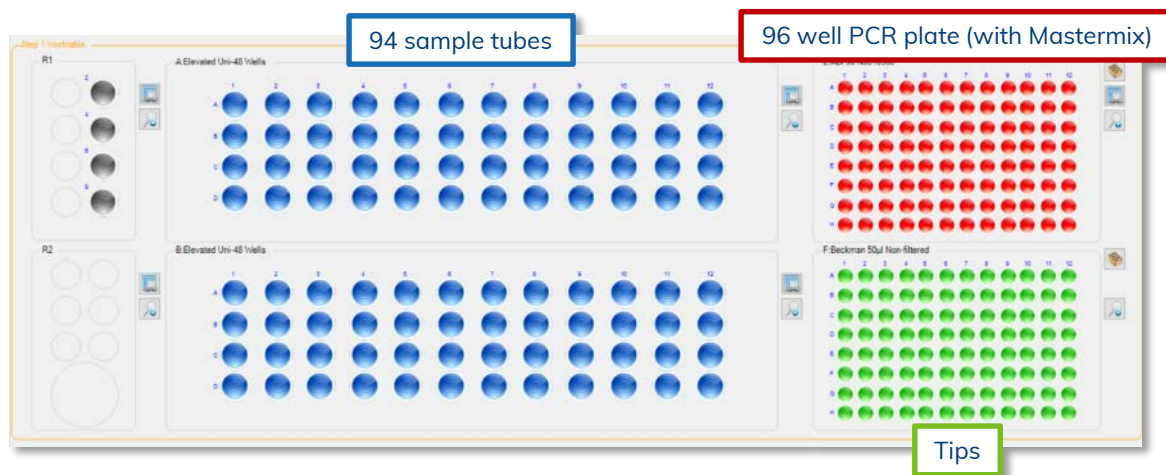
## Step 1 Transfer Mastermix

- > Transfer mastermix from 4 microcentrifuge tube to 96 well of PCR plate with EzMate 601 & 4-channel pipette module
  - Prepare mastermix by hand and separate to 4 tubes
  - Transfer mastermix from 4 tubes to 96 well PCR plate

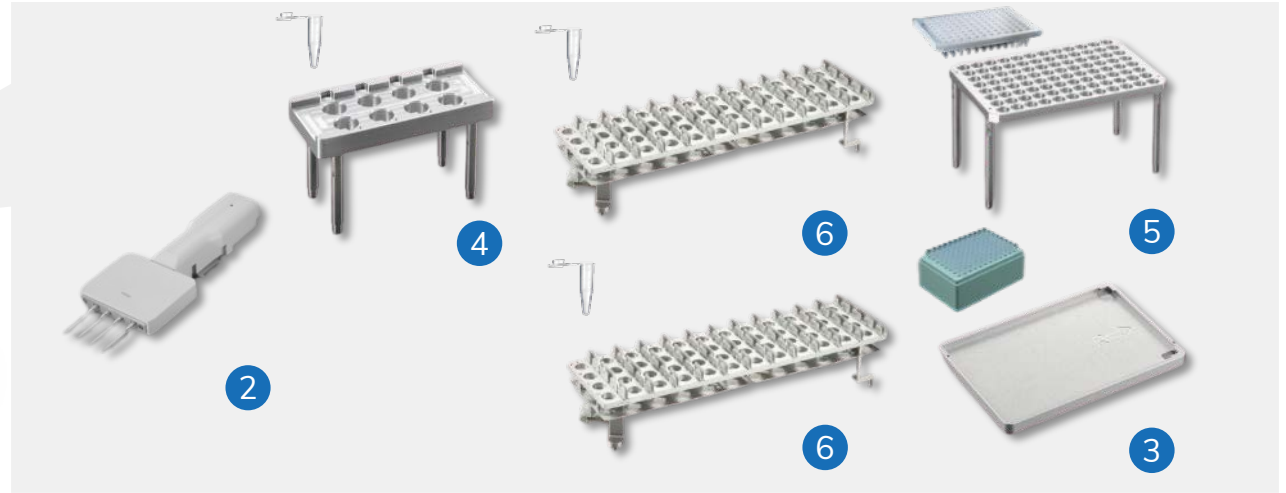


## Step 2 Transfer Samples and Control

- > Transfer 96 sample tubes to 96 well PCR plate with EzMate 601 & 4-channel pipette module



# Package



No	Part Number	Description	Q'TY
1	AREZ601-100000	6- position Automated Pipetting System 15.6" Notebook Computer and EzStarter™ control software	1
2	275-ezar06-00	4-channel, 50 µl Pipetting Module	1
3	275-ezar21-00	96 tips rack adapter	1
4	275-ezar26-00	4*2 1.5ml tubes adapter	1
5	275-ezar22-00	Elevated 96-well PCR plate adapter	2
6	275-ezarA5-00	48X tube adapter	2



POOLING

QPCR  
DETECTION

Method 2

# Sample Pooling Before QPCR Detection

# P-BEST Method Pooling

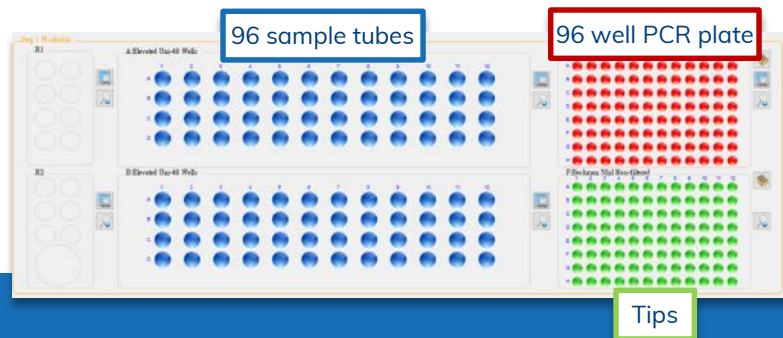
## > Workflow



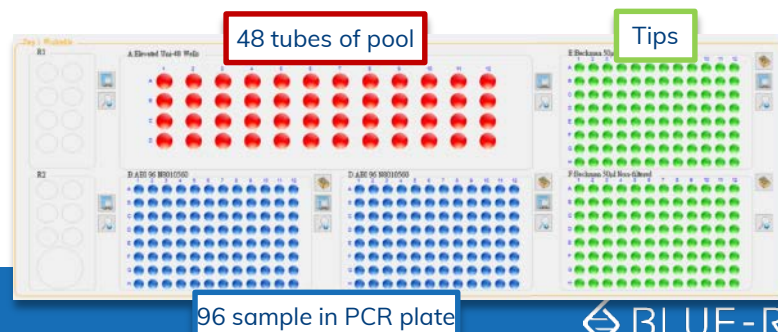
- Transfer sample < 8 min (96 samples, 1 round)
- Pooling ~ 5 hours (48 pools, 48 samples in each pool)

## > Materials

EzMate 601 + 4-channel pipette module



EzMate 601 + 1-channel pipette module





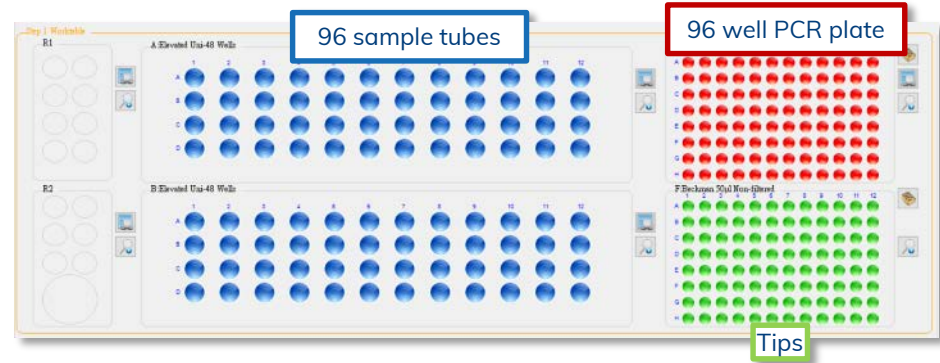
# Step 1 Apply on EzMate 601 & 4-channel Pipette Module

## Materials

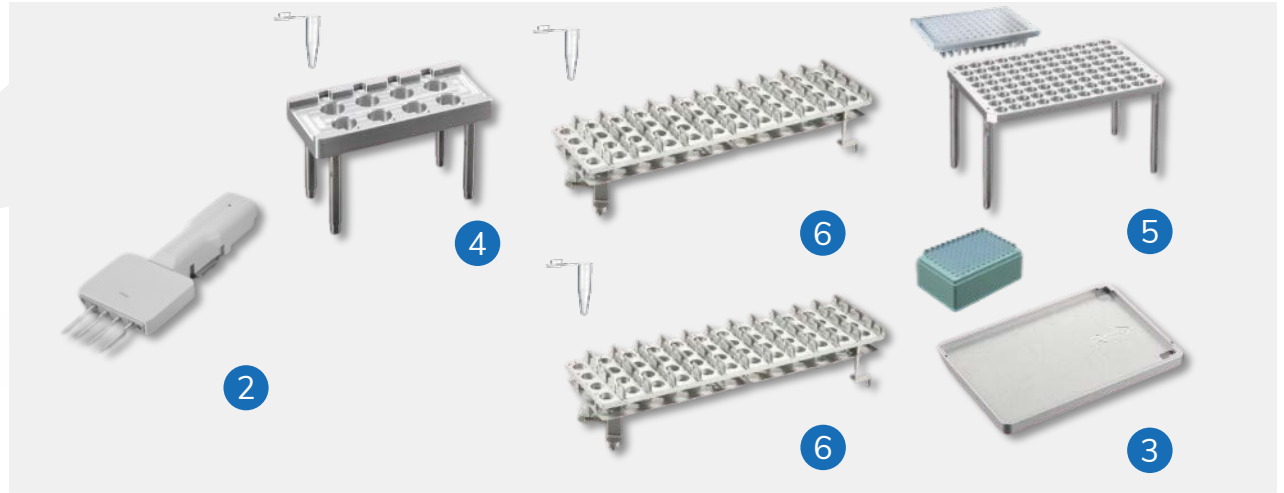
- EzMate 601 & 4-channel pipette module
- Microcentrifuge tube \*384
- 96 well PCR plate \*4

## Transfer 96 samples to PCR plate

- < 8 min
- 4 rounds



# Package



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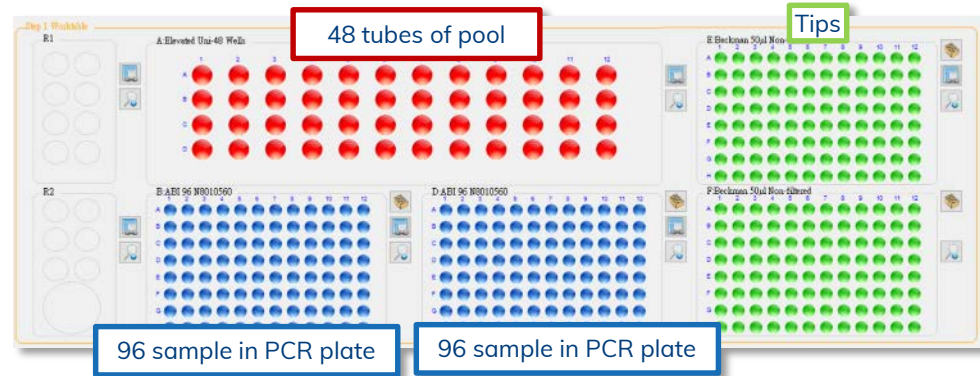
## Step 2 Apply on EzMate 601 & 1-channel Pipette Module

### Materials

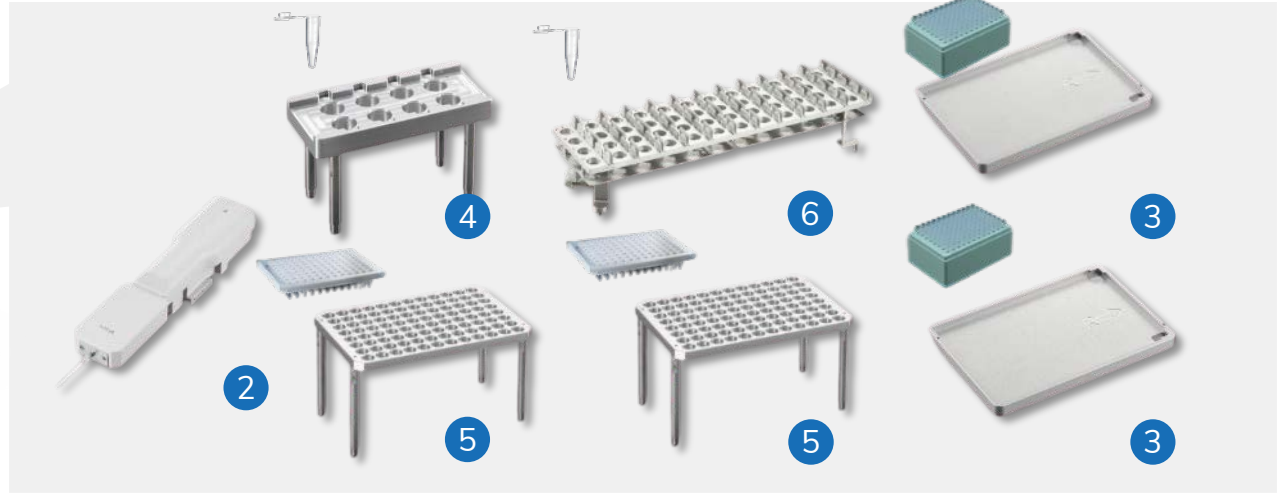
- EzMate 601 & 1-channel pipette module
- 96 well PCR plate \*4
- Microcentrifuge tube \*48

### Transfer 384 samples to 48 pools

- Total 5 hours



# Package



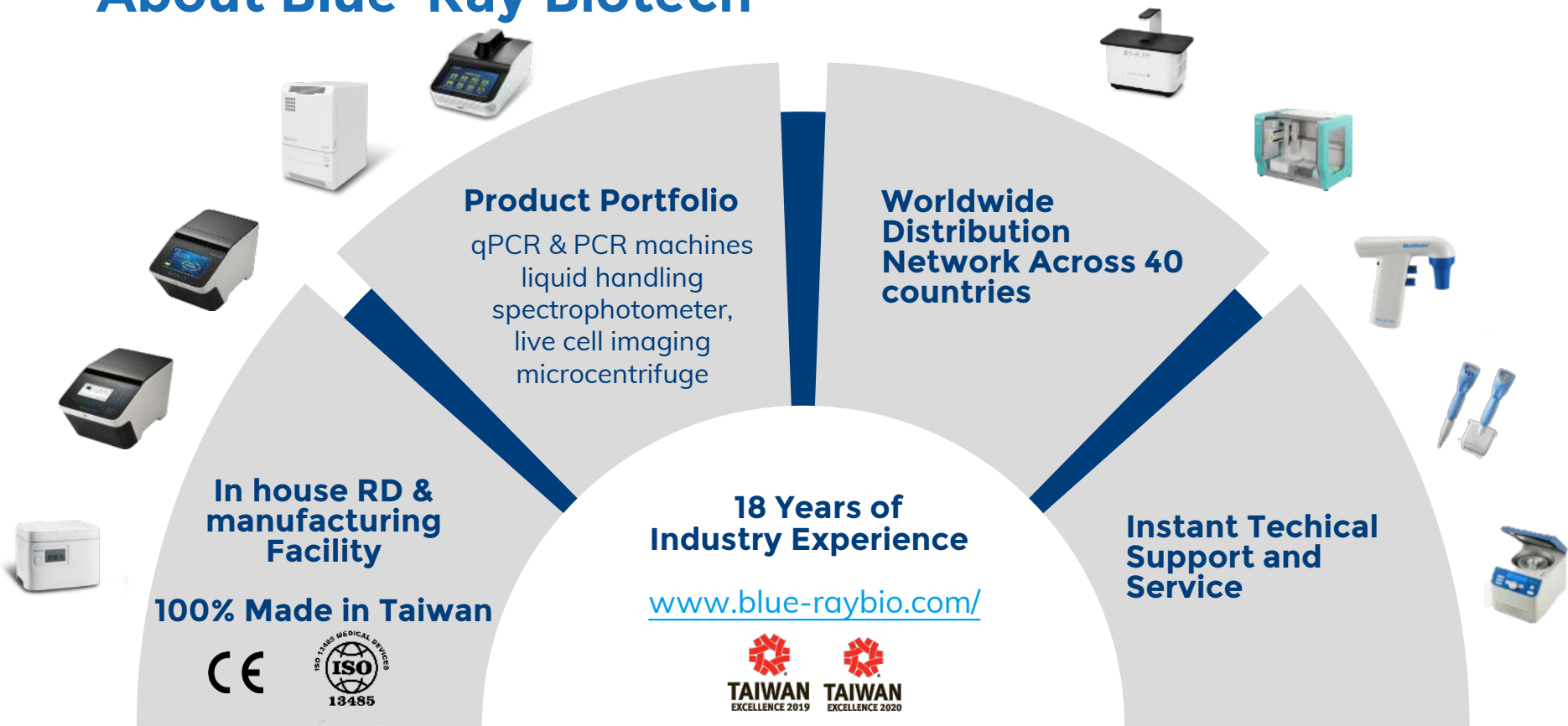
No	Part Number	Description	Q'TY
1	AREZ601-100000	6- position Automated Pipetting System 15.6" Notebook Computer and EzStarter™ control software	1
2	275-ezar01-01	1-channel, 50 µl Pipetting Module	1
3	275-ezar21-00	96 tips rack adapter	2
4	275-ezar26-00	4*2 1.5ml tubes adapter	1
5	275-ezar22-00	Elevated 96-well PCR plate adapter	2
6	275-ezarA5-00	48X tube adapter	2

# EzMate Automated Pipetting System Series

- Ideal for routine low volume pipetting
- Interchangeable 1 / 4 / 8-channel, 50 $\mu$ l / 200 $\mu$ l volume ranges
- High accuracy and precision down to 1  $\mu$ L
- Customized adapters and labwares
- A wide variety of application including: PCR/qPCR set up, NGS preparation, Sample normalization, Reagent kit manufacturing and Cell-based assay
- Customer proven quality: [25+ app notes](#) & customer base worldwide across research institution and medical companies



# About Blue-Ray Biotech





**BETTER  
EQUIPMENT, BETTER  
RESEARCH.**

**Thank You**