KEYLIGHTS
Science & Technology

Venus 100

Fully automated chemiluminescence immunoassay analyzer

Registration Certificate No：渝械注准 20222220226、20222220227

Small and exquisite
breaks through the limitation of space

fully automated | consistently smart | highly
customizable | super cost-effective

CONTENTS

Venus 100
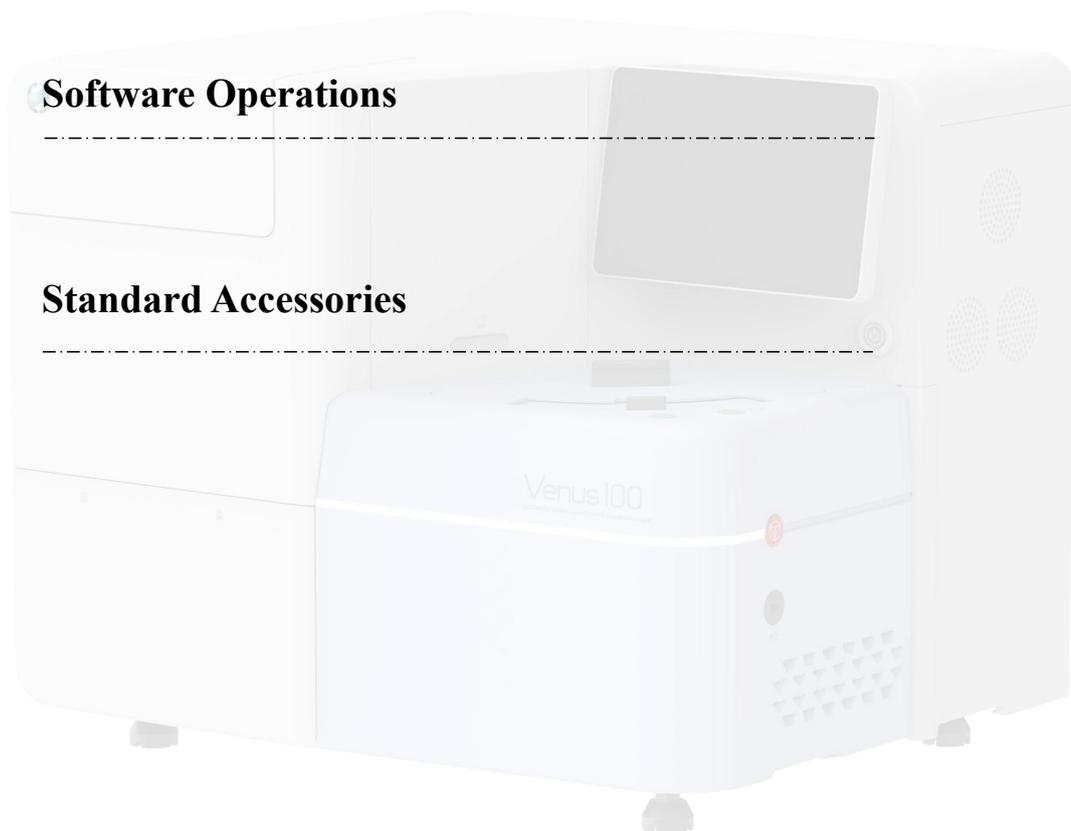
Venus 100 Series Small-sized Fully Automated Chemiluminescence Immunoassay Analyzer

Venus 100 Fully Automated Chemiluminescence Immunoassay Analyzer——120T/H

which makes use of an open magnetic particle-based chemiluminescence detection platform, compatible with various reagents. It is compact yet comprehensive, fully automated, highly intelligent, flexible and precise, meeting the diverse application scenarios of research centers, testing laboratories, and clinical departments

Reaction vessels 200	Reagent positions 15	Sample positions 40

Automated

Automated RV alignment,ragent barcode reading, sample barcode reading, maintenance before shut down, sample pipetting

Customizable

Customizable assay process,structure, software functions, which meet various assay process demands

01 02 04 03 Venus 100

Stable

Friendly visual interface, intelligent algorithm,any-time STAT assay,real-time monitoring of instrument states,automatic failure recovery

Reliable

Low failure rate,precise diameter-variable pipettor, improved dispensing accuracy, high-pressure flush of the internal and external of the pipettor to reduce carryover
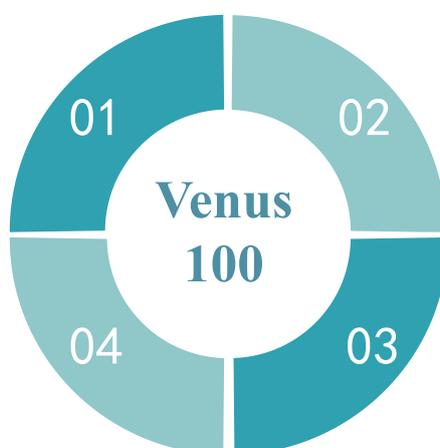
Instrument Specifications

Small and exquisite, breaks through the limitation of space

Designed to be placed on the workbench, flexible and convenient for operations, suitable for application scenarios like clinical departments

Comprehensive functions, user friendly

Supports STAT assays, automatic sample dilution, RV replenishment without an interruption in system operation

high reliability|high-precision|high throughput

Floor efficiency ratio：329.8T/m³

Dimensions：680mm**535mm*580mm

580mm

680mm

535mm
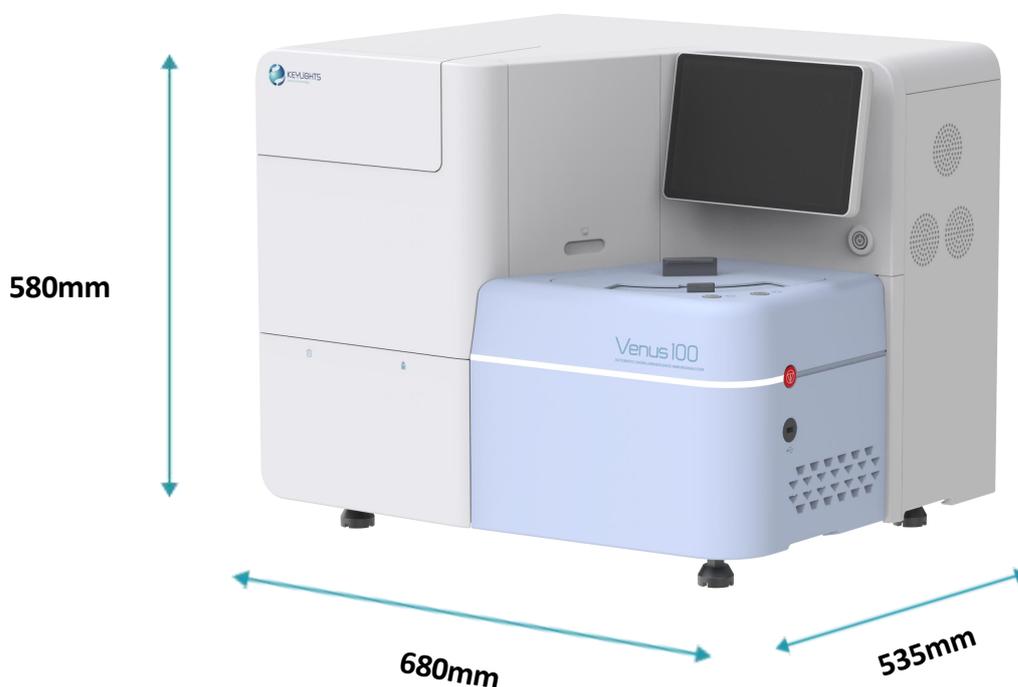
Instrument Specifications

High precision：multiple assays，CV<3%

Assay	HBsAg			T4		
Sample	QC-L	QC-M	QC-H	QC-L	QC-M	QC-H
1	32,160	146,150	3,592,118	1,531,684	257,389	48,964
2	31,931	145,023	3,642,447	1,508,973	255,466	47,926
3	33,051	144,624	3,627,949	1,503,933	250,606	48,187
4	31,983	142,050	3,558,359	1,570,790	254,819	48,718
5	32,274	146,178	3,487,209	1,476,947	253,433	47,468
			...			
16	33,341	143,268	3,500,383	1,508,425	250,366	48,434
17	32,831	145,198	3,487,557	1,505,427	254,198	48,665
18	33,133	136,377	3,587,014	1,511,734	250,122	47,856
19	33,043	145,869	3,568,147	1,493,548	255,641	47,881
20	31,949	142,385	3,531,768	1,486,852	259,053	47,285
CV	**1.54%**	**1.65%**	**1.53%**	**1.94%**	**1.69%**	**1.54%**

HBsAg

T4
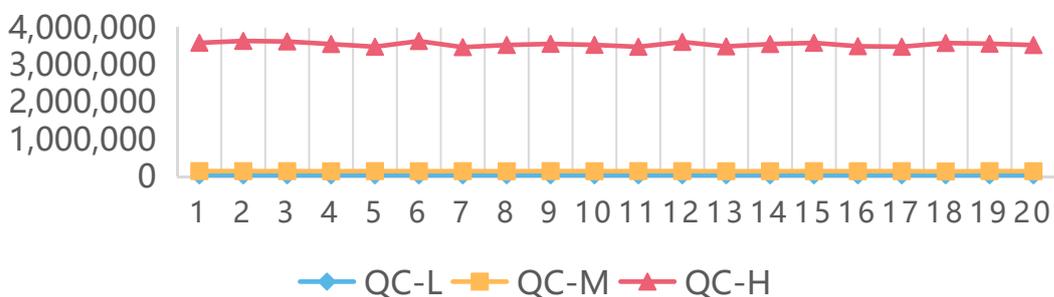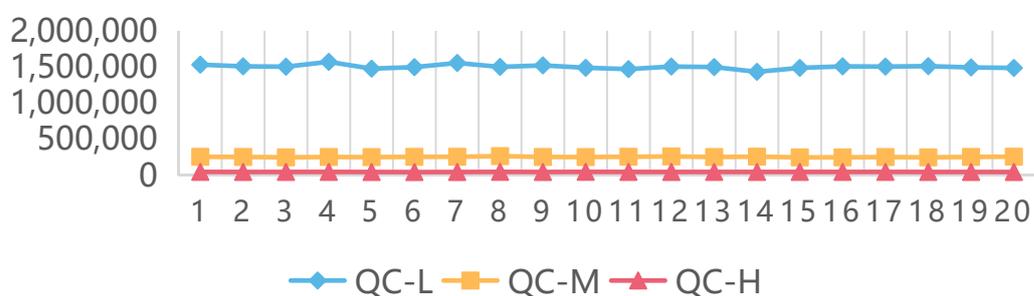
Different reagents for the same assay: CV<3%

Assay	dsDNA - reagent 1			dsDNA - reagent 2		
Sample	QC-L	QC-M	QC-H	QC-L	QC-M	QC-H
1	78,351	372,030	1,983,993	53,185	72,708	8,406,655
2	78,790	374,021	2,032,160	52,628	71,126	8,522,600
3	78,470	378,953	1,994,097	54,288	72,798	8,812,575
4	78,979	372,719	1,966,827	52,025	74,479	8,445,295
5	79,077	372,603	2,029,750	51,403	71,397	8,322,205
			...			
16	79,696	385,129	1,962,965	54,627	73,026	8,489,465
17	77,532	384,295	1,988,758	54,853	71,857	8,424,860
18	79,912	382,961	2,026,092	51,269	73,507	8,629,820
19	83,200	371,289	2,004,278	53,426	72,774	8,697,515
20	79,101	389,379	2,033,112	52,085	72,861	8,401,325
CV	**1.96%**	**1.87%**	**1.55%**	**1.92%**	**1.72%**	**1.52%**

dsDNA - REAGENT 1
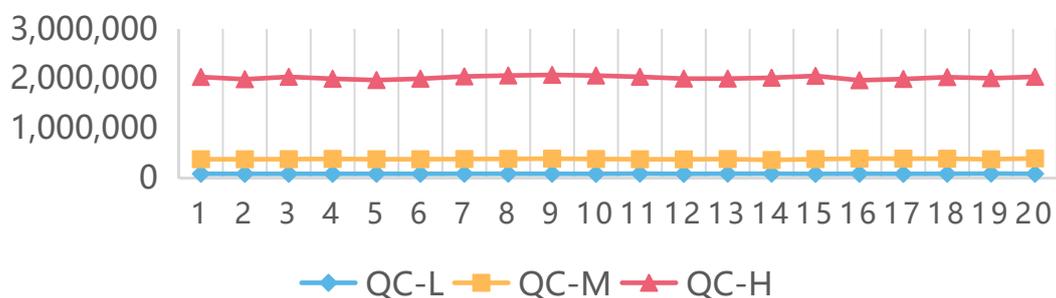
dsDNA - REAGENT 2

Functional Modules

maintenance access for the pipettor
uni-pipettor design

10.1 inch touch screen

RV hopper

Reagent compartment 2~8°C
15 reagent positions

Waste compartment

Power switch

Substrate

Sample compartment
40 sample positions

Status indicator light
with breathing effect
instrument operating status clearly informed

USB port

Emergency stop button
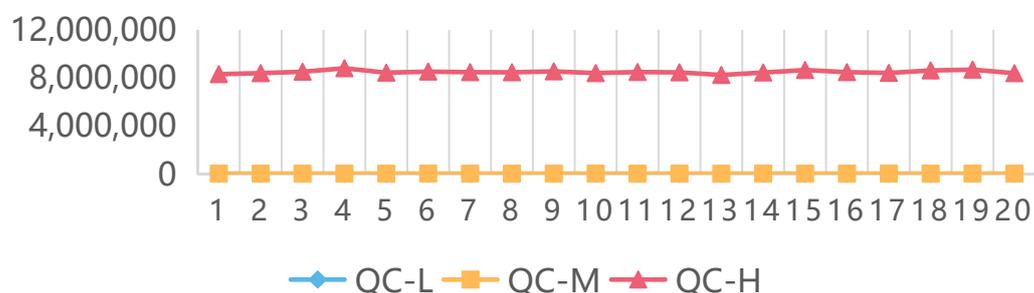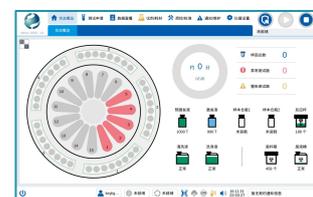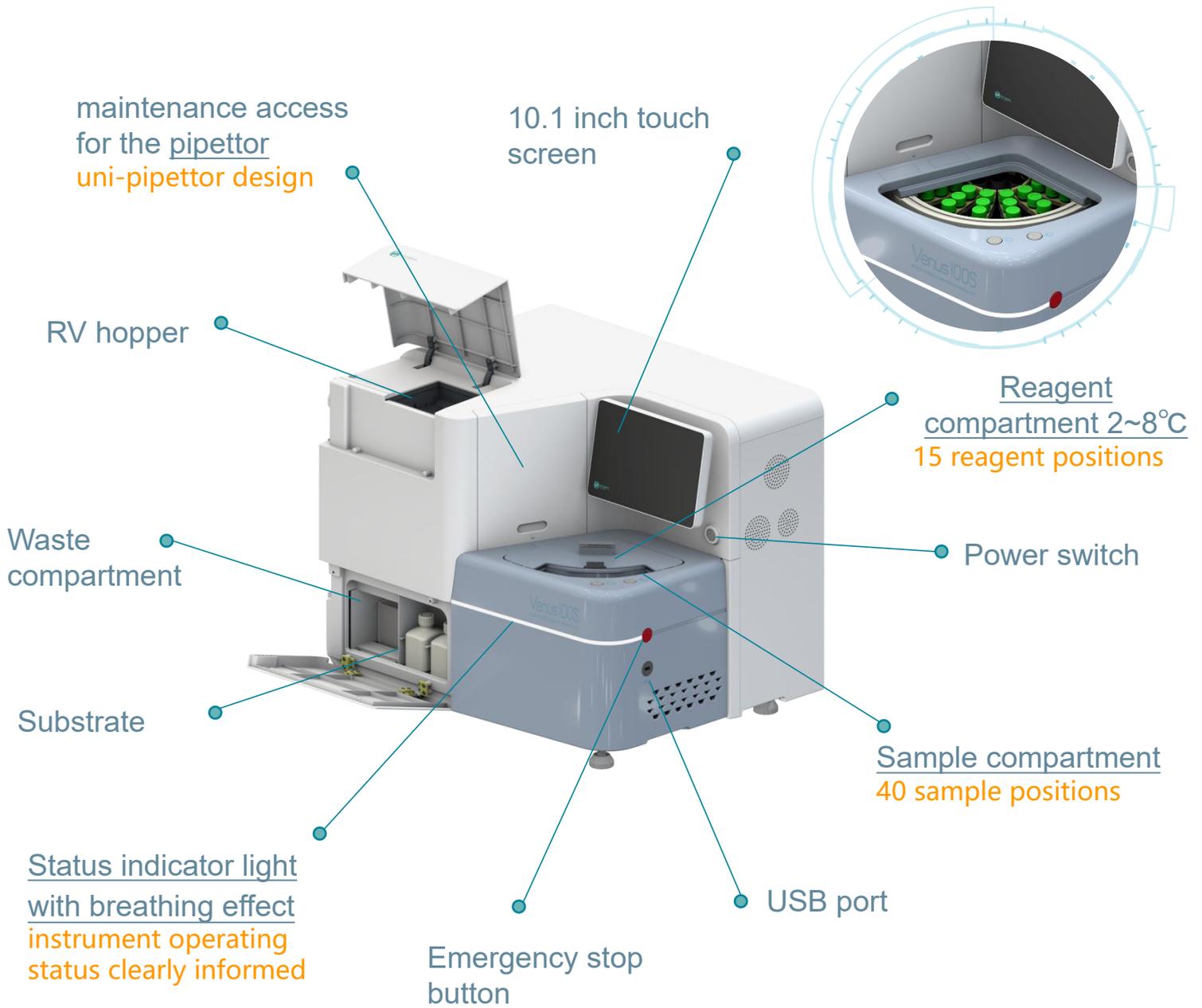
Functional Modules

Automatic RV alignment replenishment of 200 at maximum without an interruption in system operation

**Stable operation, low failure rate stable CV%, high accuracy**

15 reagent positions, supports 4-component reagents, with refrigeration function, customization available

Effective pipettor cleaning and accurate reagent aspiration

Instrument Parameters

Series	Venus 100
Detection Principle	Open platform, supporting magnetic particle AE/AP/HRP detection principles
Throughput	120T/H
Sample Positions	40 sample positions, supports automatic dilutiion
Reagent Positions	15 reagent positions, supports 4- component reagents, with refrigeration function, customization available
Reaction Vessels	Automatic alignment, replenishment of 200 at maximum without an interruption in system operation
Walk-away Time	>2h
Precision	CV≤3%
Carryover	＜1ppm
Smart System	Supports automatic barcode reading Liquid level detection, anti-collision, clots detection aspiration failure alert for pipettor probe Supports interior and exterior cleaning of pipettor probe with purified water, cleaning solution or enhanced cleaning solution Arranges RVs automatically. Supports RV replenishment without an interruption in system operation
LIS Server	Unidirectional, Bidirectional
Operation Screen	15.6-inch touch screen. User friendly. Suitable for all kinds of application scenarios
Dimensions	680*535*580 （mm)

Software Operations
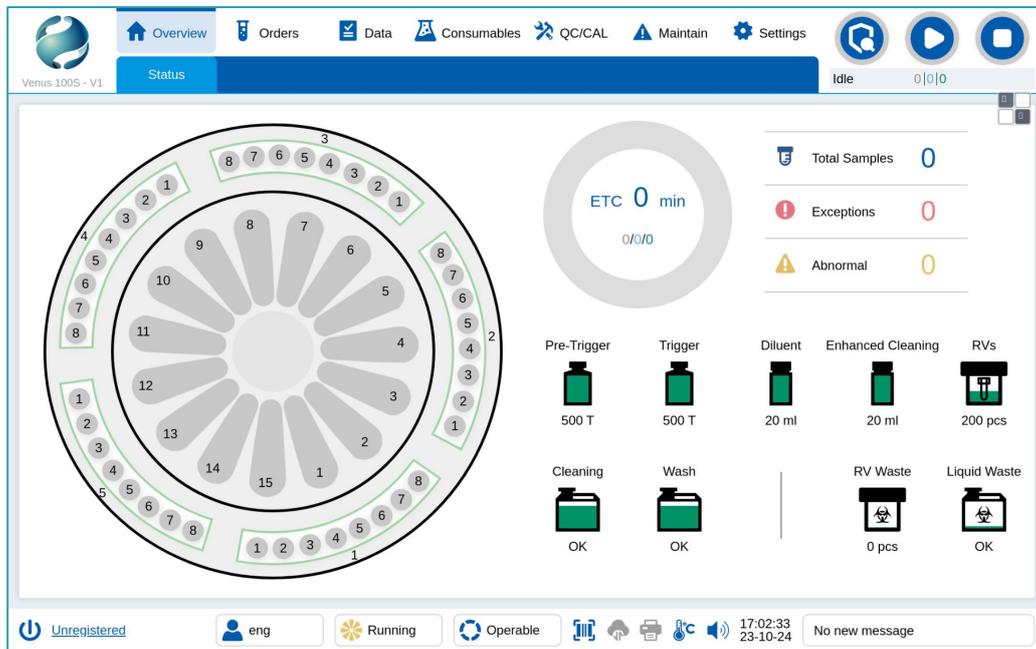
Overview

user friendly/real-time monitoring of assay tests/real-time monitoring of reagents and consumables/smart alert/ multi-language support

Standard Accessories

Reagent racks

Reaction vessels

Suottles

Sample racks

Reagents

Tumor Marker
CYFRA21-1
NSE
AFP
CEA
CA125
SCCA
CA15-3
CA19-9
CA72-4
HE4
PIVKA Ⅱ
ProGRP
CA50
CA242
LN

Fertility
FSH
E2
AMH
PROG
β-HCG
TESTO
LH
PRL
SHBG

Anemia
VB12
FA
Ferr

Cardiac Marker
hs-cTnI
NT-proBNP
BNP
CK-MB
MYO
LP-PLA2
H-FABP

Thyroid
FT4
FT3
TSH
TT3
TT4
TG
TGAb
TPOAb

Inflammation Monitoring
PCT
SAA
IL-6

Kidney Marker
Cortisol

Endocrine hormone
GH
ACTH

Stomach Marker
PG I
PG II
G17

Coagulation
D-Dimer
FDP
PIC
TAT
TM
tPAI.C

Liver Marker
PIIINP
CIV
HA

Bone Metabolism
PTH
CT
25-OH VD

Glyco Metabolism
C-P
INS

Note: Product storage and validity period: 2 ℃~8 ℃, Warranty: 12 months