

Better Solution for

PCR & real-time PCR



real-time qPCR Probe

Dual labeled real-time qPCR Probe

ValuMix™ qPCR Probe
(Probe + Primer delivered in ONE tube)

BHQnova™ qPCR Probe

BHQplus™ qPCR Probe

BHQ® Probe MasterMix

Primer

Reference Dye

PCR related product

INNO™ Taq DNA Polymerase

INNO™ One-Step RT qPCR Kit
(Taqman Probe)

DNA Ladder

INNOGEL™ Agarose

Buffer & Biochemicals

PCR Consumable
(Reload tip, Filter tip, PCR plate, PCR tube)

Instrument

BHQ Probe Selection Guide

Dual labeled qPCR Probe **BHQ** PROBES

5' Fluorophore 3' BHQ



20 - 30 complementary bases
to the target sequence

- ✓ Standard qPCR Assays (20~30 bases)
- ✓ qPCR Probe 1nmol ≙ 약 500 reactions
(Final concentration 100nM, total volume 20ul기준)
- ✓ 홈페이지를 통해 무료로 제공하고 있는 **real-time Design Software** 를 이용하여 쉽고 빠르고 간편하게 Design하실 수 있습니다.
- ✓ Dual HPLC = Reverse Phase HPLC + Anion Exchange HPLC

BHQnova™ Probe **BHQ** nova PROBES

5' Fluorophore 3' BHQ



>25 complementary bases
to the target sequence

- ✓ qPCR Assays (>25 bases)
- ✓ Gene Expression / CNV Assays
- ✓ Probe 내부에 nova quencher를 도입해 길이가 긴 Probe design에 최적의 포맷 제공
- ✓ Quenching 효율 향상 / 기존 qPCR Probe 대비 Signal Noise감소
- ✓ 홈페이지를 통해 무료로 제공하고 있는 **real-time Design Software** 를 이용하여 쉽고 빠르고 간편하게 Design하실 수 있습니다.

ValuMix™ Probe/Primer Set

Flexible Primer ratio

Probe to primer ratios range
anywhere from 1:1 to 1:4.5

Probe to Primer Ratio



Enter your desired ratio at any tenth decimal between 1 and 4.5, or click on the vial

1 :

Delivered Amount

Primer :

Probe :

- ✓ Probe to Primer ratio는 1:1 ~ 1:4.5 선택가능
- ✓ **SNP Genotyping**
- ✓ **Gene Expression**

BHQplus® Probe **BHQ** plus PROBES

5' Fluorophore 3' BHQ



15 - 25 complementary bases
to the target sequence

- ✓ qPCR Assays (15~25 bases)
- ✓ **SNP Genotyping에 최적화**
- ✓ Modified C,T nucleotides to enhance Tm
Enhanced mismatch discrimination due to shorter length.
- ✓ 홈페이지를 통해 무료로 제공하고 있는 **real-time Design Software** 를 이용하여 쉽고 빠르고 간편하게 Design하실 수 있습니다.
- ✓ Dual HPLC = Reverse Phase HPLC + Anion Exchange HPLC

BHQ Probe / Primer / MasterMix

Dual labeled qPCR Probe



Cat. #	5' Report Dye	Quencher	Scale	Min. Yield	Purification
DLO-RFB-5	FAM	BHQ-1	50nmol	10nmol	RP HPLC
DLO-FB1-X			100nmol	>10nmol	Dual HPLC (RP HPLC + AX HPLC)
			200nmol	>25nmol	
DLO-CGB1-X	CAL Fluor® Gold 540	BHQ-1	1umol	>60nmol	Dual HPLC
			25nmol	5nmol	
			50nmol	>10nmol	
DLO-HB1-X	HEX	BHQ-1	200nmol	>25nmol	Dual HPLC
			1umol	>60nmol	
			25nmol	5nmol	
DLO-COB1-X	CAL Fluor® Orange 560	BHQ-1	50nmol	>10nmol	Dual HPLC
			200nmol	>25nmol	
			1umol	>60nmol	
DLO-Q5B2-X	Quasar® 570	BHQ-2	25nmol	5nmol	Dual HPLC
			50nmol	>10nmol	
			200nmol	>25nmol	
DLO-CAB2-X	CAL Fluor® Red 610	BHQ-2	1umol	>60nmol	Dual HPLC
			25nmol	5nmol	
			50nmol	>10nmol	
DLO-Q6B2-X	Quasar® 670	BHQ-2	200nmol	>20nmol	Dual HPLC
			1umol	>40nmol	
			50nmol	>3nmol	
DLO-Q7B2-X	Quasar® 705	BHQ-2	200nmol	>10nmol	Dual HPLC
			1umol	>40nmol	

* TET, JOE, VIC, HEX, Cy3, Texas Red, ROX, Cy5, Cy5.5 의 대체 dye는 4PAGE의 Dye Selection chart를 참조 하시기 바랍니다.

BHQnova™ Probe



Cat. #	5' Report Dye	Quencher	Scale	Min. Yield	Purification
DLO-FBN-X	FAM	BHQnova	25nmol	>2nmol	RP HPLC
			50nmol	>10nmol	
			200nmol	>25nmol	
DLO-TBN-X	TET	BHQnova	1umol	>60nmol	RP HPLC
			25nmol	>5nmol	
			50nmol	>10nmol	
DLO-CGBN-X	CAL Fluor® Gold 540	BHQnova	200nmol	>25nmol	RP HPLC
			1umol	>60nmol	
			25nmol	>5nmol	
DLO-HBN-X	HEX	BHQnova	50nmol	>10nmol	RP HPLC
			200nmol	>25nmol	
			1umol	>60nmol	
DLO-COBN-X	CAL Fluor® Orange 560	BHQnova	25nmol	>5nmol	RP HPLC
			50nmol	>10nmol	
			200nmol	>25nmol	
			1umol	>60nmol	

* TET, JOE, VIC, HEX, Cy3, Texas Red, ROX, Cy5, Cy5.5 의 대체 dye는 4PAGE의 Dye Selection chart를 참조 하시기 바랍니다.

BHQplus® Probe



Cat. #	5' Report Dye	Quencher	Scale	Min. Yield	Purification
DLO-FBP-X	FAM	BHQ-1	50nmol	10nmol	RP HPLC
DLO-GBP-X			CAL Fluor® Gold 540	25nmol	5nmol
DLO-CGPX	CAL Fluor® Orange 560	BHQ-1	25nmol	5nmol	Dual HPLC
DLO-RBP-X	CAL Fluor® Red 610	BHQ-2	25nmol	5nmol	Dual HPLC
DLO-QBP-X	Quasar® 670	BHQ-2	25nmol	5nmol	Dual HPLC

ValuMix™ Probe/Primer Set

Cat. #	5' Report Dye	Quencher	Probe Quantity	Probe Purification	Primer Purification
DLOM-RFB-X	FAM	BHQ-1	0.5nmol	RP HPLC	Salt-Free
			5nmol		
			20nmol		
DLOM-COB1-X	CAL Fluor® Orange 560	BHQ-1	5nmol	Dual HPLC	Salt-Free
			20nmol		
			5nmol		
DLOM-CAB1-X	CAL Fluor® Red 610	BHQ-2	20nmol	Dual HPLC	Salt-Free
			5nmol		
			20nmol		
DLOM-Q6B2-X	Quasar® 670	BHQ-2	5nmol	Dual HPLC	Salt-Free
			20nmol		
			5nmol		
DLOM-F(T-B1)-X	FAM	Internal T-BHQ-1	5nmol	Dual HPLC	Salt-Free
			20nmol		
			5nmol		

* TET, JOE, VIC, HEX, Cy3, Texas Red, ROX, Cy5, Cy5.5 의 대체 dye는 4PAGE의 Dye Selection chart를 참조 하시기 바랍니다.

Primer

Standard Oligonucleotide Synthesis

Cat. #	Product	Synthesis Scale	Minimum Guarantee	Purification
COS-1	Base Charge	50nmol	20~40nmol	Salt-Free
COS-2	Base Charge	200nmol	80~160nmol	
COS-5	Base Charge	1umol	400~800nmol	

Primers Ordered with Probes

Cat. #	Product	Synthesis Scale	Minimum Guarantee	Purification
PP-5	Primer (up to 30 bases each)	50nmol	20~40nmol	Salt-Free
PP-2		200nmol	80~160nmol	
PP-1		1umol	400~800nmol	

Standard Oligonucleotide Purification (추가 서비스)

* Cloning, Sequencing 등의 목적으로 사용시 Purification을 권장합니다.

* Purification시 보장량은 감소 할 수 있습니다.

* 정제 옵션에 따라 추가 비용 발생

* 정제 옵션

1. Cartridge
2. RP HPLC
3. AX HPLC
4. Dual HPLC

BHQ® Probe MasterMix

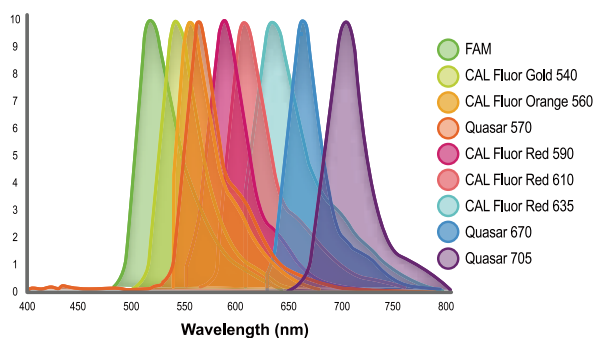
- 2X Probe mastemix
- Optimal SNP genotyping
- High Fedelity
- Low Background SNP genotyping

품번	품명	규격
KBS-1040-00X	2X BHQ Probe Master Mix (No ROX)	1.25mL
		2.5mL
		5.0mL
		10mL
KBS-1040-01X	2X BHQ Probe Master Mix (Low ROX)	1.25mL
		2.5mL
		5.0mL
		10mL
KBS-1040-02X	2X BHQ Probe Master Mix (Standard ROX)	1.25mL
		2.5mL
		5.0mL
		10mL

Instrument	ROX Reference Dye
Rotor-Gene™, Rotor-Gene™ Q, DNA Engine Opticon™, Opticon™ 2 and Chromo 4™, Mastercycler® ep realplex, Cepheid Smart Cycler®, Roche LightCycler® 480, Bio-Rad CFX96, Illumina Eco™	No ROX
Applied Biosystems® 7500, ViiA™ 7, QuantStudio™ 12K Flex, Agilent Mx3000P™, Mx3005P™, Mx4000™	ROX Low
Applied Biosystems® 5700, 7000, 7300, 7700, 7900HT, StepOne™, StepOnePlus™	ROX Standard

Fluorophore and BHQ dye selection chart

This chart is intended to guide you through the dye selection process for your oligonucleotide. A fluorophore and quencher combination may be selected for applications such as probe-based qPCR and SNP genotyping.



Fluorophore	Alternate dyes	5' Dye		Recommended quencher
		Excitation	Emission	
● Biosearch Blue™		352	447	BHQ-1
FAM		495	520	BHQ-1
TET		521	536	BHQ-1
● CAL Fluor® Gold 540	<i>VIC/TET/JOE</i>	522	544	BHQ-1
JOE		529	555	BHQ-1
HEX		535	556	BHQ-1
● CAL Fluor Orange 560	<i>VIC/HEX/JOE</i>	538	559	BHQ-1
● Quasar® 570	<i>CY3</i>	548	566	BHQ-2
TAMRA		557	583	BHQ-2
● CAL Fluor Red 590	<i>TAMRA</i>	569	591	BHQ-2
ROX		586	610	BHQ-2
● CAL Fluor Red 610	<i>TEXAS RED/ROX/ ALEXA FLUOR® 594</i>	590	610	BHQ-2
● CAL Fluor Red 635	<i>LC RED® 640</i>	618	637	BHQ-2
● Pulsar® 650		460	650	BHQ-2
● Quasar 670	<i>CY5</i>	647	670	BHQ-2*, BHQ-3
● Quasar 705	<i>CY5.5</i>	690	705	BHQ-2*, BHQ-3

● Fluorophores proprietary to LGC, Biosearch Technologies

* BHQ-2 dye is recommended for Quasar 670 and Quasar 705 fluorophores due to static quenching

Reference Dye

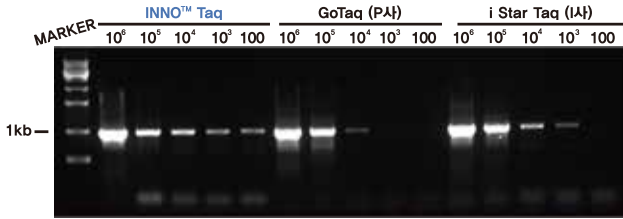
Cat. #	Product	Size
SR-1000-1	SuperROX®, concentration 15 µM	1 ml
SR-1000-10		10 ml
SR-1000-100		100 ml
SR-1000-1000		1000 ml

Calibration Standards

Cat. #	Product	Size
RD-5025-5	6-FAM T10 Calibration Standard	5 nmol
RD-5063-5	Quasar® 570 T10 Calibration Standard	5 nmol
RD-5065-5	Quasar® 670 T10 Calibration Standard	5 nmol
RD-5067-5	Quasar® 705 T10 Calibration Standard	5 nmol
RD-5080-5	CAL Fluor® Gold 540 T10 Calibration Standard	5 nmol
RD-5081-5	CAL Fluor® Orange 560 T10 Calibration Standard	5 nmol
RD-5082-5	CAL Fluor® Red 610 T10 Calibration Standard	5 nmol
RD-5083-5	CAL Fluor® Red 590 T10 Calibration Standard	5 nmol
RD-5084-5	CAL Fluor® Red 635 T10 Calibration Standard	5 nmol

Standard PCR Taq Premix

INNO™ Taq Premix

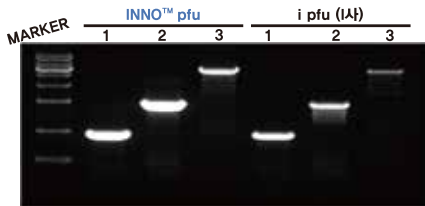


Greater sensitivity of INNO™ Taq Polymerase
Template : M13 phage DNA
Target size : 1,0 kb

INNO Taq Selection Guide

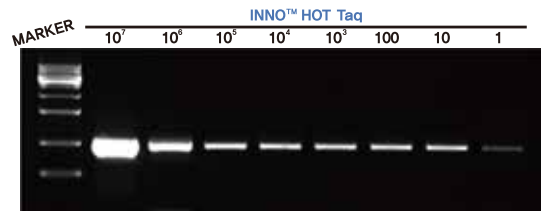
Application	INNO™ Taq	INNO™ HOT	INNO™ pfu	INNO™ qPCR
Standard	o	o	o	
HOT-Start		o		
High-Fidelity			o	
Long PCR			o	
GC-rich		o		
Multiplex PCR		o		
TA Cloning	o	o	Blunt End	
real-time PCR				o

INNO™ pfu Taq Premix



Greater yield of INNO™ pfu Polymerase
Template : M13 phage DNA
Target size : 1,0kb ~ 5,0kb

INNO™ HOT Taq Premix



Highly specific amplification of INNO™ HOT Taq Polymerase
Template : M13 phage DNA
Target size : 1.0 kb

품명	규격	정상가	
INT-12250	INNO™ Taq Master Mix (2X) with dye, in Vial	1ml X 5	80,000
INT-12096	INNO™ Taq Premix (2X) with dye, in strip	96 TESTS	50,000
INH-12250	INNO™ HOT Taq Master Mix (2X) with dye, in Vial	250 RXN (2,5ML)	90,000
INH-12096	INNO™ HOT Taq Premix (2X) with dye, in strip	96 TESTS	90,000
INP-12250	INNO™ pfu Taq Master Mix (2X) with dye, in Vial	250 RXN (2,5ML)	85,000
INP-12096	INNO™ pfu Taq Premix (2X) with dye, in strip	96 TESTS	60,000
INQ-430	INNO™ 2X qPCR Master Mix (with Evagreen)	250 RXN (2,5ML)	90,000
INT-430	INNO™ One-Step RT qPCR Kit (Taqman probe)	100 RXN	160,000

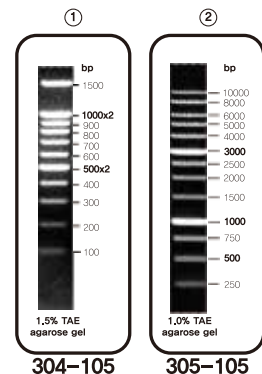
DNA Ladder

304-105 Number of Bands and approx. DNA Mass :

Base Pairs	100	200	300	400	500X3	600	700	800	900	1000x2	1500
DNA mass ng	20	20	30	50	150	80	70	110	120	160	150

305-105 Number of Bands and approx. DNA Mass :

Base Pairs	250	500	750	1000	1500	2000	2500	3000	4000	5000	6000	8000	10000
DNA mass ng	20	30	60	210	50	60	70	200	60	60	60	60	60



품번	품명	규격	할인가
304-105	100bp plus DNA Ladder (blue, ready to use)	500uL	35,000
305-105	1000bp/1kb DNA Ladder (blue, ready to use)	500uL	35,000

Buy one, Get one Free



INNOGEL™ Agarose

Feature

- 1200 g/cm²의 Gel강도로 Blotting시 handling용이
- 넓은 분석 범위 ; 100bp ~23kb
- 다양한 실험방법및 목적에 응용가능
- EEO (-mr) ; 0.09~0.13의 높은 순도
- DNase/RNase ; None Detected

[₩400,000]

Sample 요청하세요!
INNOGEL™ Agarose trial size(2G) 제공!

품 번	품 명	규 격	할인가
ING-0500	INNOGEL™ Agarose LE (1+1)	500g X 2	400,000

Band-it™ mini electrophoresis System

Band-it™ 제품 특징

미니전기영동장치
3단계 (35V, 50V, 100V) Voltage 조절가능
Magnetic sensor로 lid가 닫혔을 경우에만 작동



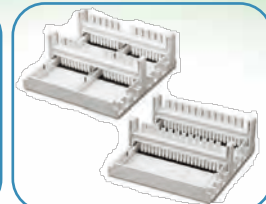
Part #: E-3505

Band-it™ Specification

크기 (W x D x H) : 120 x 110 x 45mm
Bath 용량 : 230ml
재질 : PC (Polycarbonate) / PP with high temperature resistance
Power : AC 100V ~ 120V / 50-60Hz or
AC 220V ~ 240V / 50-60Hz
Max power : 40W
Output Power : DC 35V / DC 50V / DV 100V
Timer : 1~99분 설정 가능
전체 크기 (W x D x H) : 190 x 130 x 55mm



Convenient, snap-in power supply eliminates cable



Includes casting sets with multichannel compatible combs

Pre-made Buffer & Biochemicals

품 번	품 명	규 격	정상가
BU-00020	0.5M EDTA Solution, pH 8.0	500ml	37,000
BU-10051	RNase A	100mg	120,000
BU-00051	RNase A Solution. (10mg/ml)	5ml*2	140,000
BU-00012	TAE Buffer, 50X	1L	64,000
BU-00013	TBE Buffer, 10X	1L	40,000
BU-00054	TE Buffer, pH 7.5	500ml	30,000
BU-00055	TE Buffer, pH 8.0	500ml	30,000
BU-00021-1	Water, Ultra Pure Distilled	100ml	11,000
BU-00021	Water, Ultra Pure Distilled	1L	30,000
BU-00021N-1	Water, Nuclease free	100ml	14,000
BU-00022	Water, DEPC Treated	500ml	40,000

PCR Consumable

Woodpecker™ Reloads Tip

- ✓ 저장공간 절약형 (일반 Pipet Tip대비 75% 공간 절약)
- ✓ RNase and DNase Free



1. Transfer positioner를 첫번째 Tip deck에 올려놓은뒤 엄지와 세번째 손가락을 이용 Box에서 분리해 냅니다.

사용방법

2.한손으로 빈 Rack을 잡고 box에서 분리한 tip deck를 첫번째 줄 부터 차례로 삽입을 합니다.



품 번	품 명	규격	정상가
P-2102	Woodpecker Reloads™ Tip Transfer System, 10μl (Natural color)	960ea/pkg	30,000
P-2104	Woodpecker Reloads™ Tip Transfer System, Extra long 10μl (Natural color)	960ea/pkg	31,000
P-2101-Y	Woodpecker Reloads™ Tip Transfer System, 200μl (Yellow color)	960ea/pkg	28,000
P-2101-N	Woodpecker Reloads™ Tip Transfer System, 200μl (Natural color)	960ea/pkg	26,000
P-2103-N	Woodpecker Reloads™ Tip Transfer System, 1,000μl (Natural color)	840ea/pkg	26,000

SHARP™ Precision Barrier Tip

- ✓ 개별 포장 및 멸균
- ✓ RNase and DNase Free
- ✓ Low Retention Polymer technology 적용으로 잔유물이 남지 않습니다.
- ✓ Cross-contamination이 걱정되신다면 꼭 사용하십시오.

품 번	품 명	규격	정상가
P-1096-FR	SHARP™ Precision Barrier Tips, Extra long 10μl for P-2, P-10	96*10racks	78,000
P-1121	SHARP™ Precision Barrier Tips, 20μl for P-20	96*10racks	78,000
P-1125	SHARP™ Precision Barrier Tips, 100μl for P-100	96*10racks	78,000
P-1122	SHARP™ Precision Barrier Tips, 200μl for P-200	96*10racks	78,000
P-1124	SHARP™ Precision Barrier Tips, For most 250μl and 300μl Multichannels	96*10racks	78,000
P-1126	SHARP™ Precision Barrier Tips, 1250μl for P-1000	96*6racks	62,000



ThermoGrid™ PCR Tube

- ✓ Fits most popular Thermal Cyclers
- ✓ RNase / DNase and Pyrogen free
- ✓ Autoclave Safe

품 번	품 명	규격	정상가
C-18066-FT2	ThermoGrid™ 0.2ml Individual Tubes, with attached Flat cap	1,000pkg	40,000
C-18067	ThermoGrid™ 0.2ml, 8-Strips tubes without caps, natural color	125strips	80,000
C-18068	ThermoGrid™ 8-Strips Dome caps	125strips	15,000
C-18070-RT	ThermoGrid™ 8-Strips tubes and 8-strips Flat caps (optically clear / Q-PCR)	125strips	90,000
C-18063	ThermoGrid™ 0.2ml, 8-Rigid Strips tubes, attached individual Dome caps	120strips	80,000
C-18098-3	0.2ml, 8-Strips tubes with attached individual Domed caps	120strips	90,000
C-18098-4	0.2ml, 8-Strips tubes with attached individual Flat caps (Low profile)	120strips	90,000
1005173	0.1ml qPCR 8-Strip White tubes (With optical caps)	120strips	90,000
1005176	0.2ml qPCR 8-Strip White tubes (With optical caps)	120strips	90,000



ThermoGrid™ PCR Plate & Sealing Film

품 번	품 명	규격	정상가
C-18096	ThermoGrid™ PCR Plates, 96 well pcr plate without skirt (Non-Skirt)	25ea/pk	80,000
C-18080-10	ThermoGrid™ PCR Plates, 96 well Mini Skirt plate (Semi-Skirt)	10ea/pk	40,000
real-time qPCR 호환장비 (C-18096, C18080-10) : Applied BioSystems (7000, 7300, 7500 FAST, 7900HT FAST, ProFlex PCR System, QuantStudio 12K) Analytik Jena / Biometra (qTOWER, SpeedCycler, Topical), Bio-Rad / MJ Research (CFX Connect, CFX96 Touch, Chromo4, DNA Engine Opticon 2, iCycler, iQ5, MiniOpticon, MyiQ), Eppendorf (Mastercycler ep realplex), PeqLab (peqSTAR 96Q), Stratagene (Mx4000, Mx3000, Mx3005P), Techne (PrimeQ, Quantica)			
C-18081-15	ThermoGrid™ 0.1mLX 96well Plate for Fastplate thermal cyclers only	15ea/pk	50,000
real-time qPCR 호환장비 (C-18081-15) : Applied BioSystems (7500 FAST, 7900HT FAST, StepOne, StepOnePlus, ViiA7 FAST) Bio-Rad / MJ Research (CFX Connect, CFX96 Touch)			
B-1212-5	96- Plate Sealing Membrane (2mm, non-sterile), 100pcs.	100pcs.	48,000
B-1212-RT2	RealTime PCR Adhesive Film, Polyester for Real Time PCR, (2,0mm)	100pcs.	200,000



Centrifuge

Denville™ 24-M & 24-MR High Speed Microcentrifuge



	C-7000-24M	C-7000-24MR
Speed Range :	500rpm-15,000rpm	500rpm - 15,000rpm
Max.RCF :	21,400xg	21,400xg
Acceleration Time :	14s	15s
Deceleration Time :	13s	15s
Max. Capacity :	24 x 1.5/2.0mL	24 x 1.5/2.0mL
Temperature Range :	N/A	10 to 40°C
Dimensions (WxDxH) :	26.7 x 39.5 x 23 cm	30 x 50 x 45 cm
Weight :	11.8kg	28.2kg
Timer :	1s99min59s or Short-spin	1s99min59s or Short-spin
Electrical :	AC100~120V, 200W	AC100~120V, 200W

- High Speed, 21,400xg
- 컴팩트한 사이즈와 저소음 설계
- 작동상태를 한눈에 확인 할 수 있는 Full color 디스플레이 적용
- 24개의 1.5ml/2.0ml 튜브 로터
- 보증기간 2년
- -10°C~40°C 냉장기능 (24-MR 모델)



자동 잠금 시스템



High Speed Range

Mini Plate Spinner centrifuge with two position rotor



Part #: C-1000

제품특징

- Real time 용 PCR plate 전용 원심분리기
- 2개의 plate를 수직으로 넣어서 빠르게 spin down 가능
- 버튼을 누르면 최고 속도로 빠르게 도달하여 spin down
- A4용지만한 작은 size로 공간 효율성이 뛰어남
- 최대 2500rpm 속도로 회전

StripSpin™ 12 Mini Centrifuge myFuge™ 12 Mini Centrifuge



Part #: C-1248

Capacity
4 x 12 position PCR strips
4 x 8 position PCR strips
48 x 0.2ml PCR tubes



Unique COMBI-Rotor



Compact, low profile design



Part #: C-0812

제품특징

- 4 x 12 position PCR Strips
- 5,500 rpm / 2,000 xg
- Starts & stops with opening/closing of the lid

Capacity
12 x 1.5/2.0ml tubes
32 x 0.2ml PCR tubes
4 x 0.2ml PCR strips

부경에스엠 주요 공급사



(주)부경에스·엠

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