



Honya Biotech

Professional Manufacturer of DNA/RNA Synthesizers, Accessory
Instruments, Consumables, Chemical Raw Materials, etc.



END TO END SOLUTION FOR OLIGO SYNTHESIS



PRODUCT CATALOGUE

ABOUT US

Honya Biotech is committed to building a world-leading supplier for nucleic acid synthesis upstream products. Focusing on R&D, production and sales of oligo synthesis equipment, consumables, chemical raw materials, and process method, Honya Biotech provides customer with the fastest and most efficient DNA/RNA synthesis solutions. Besides, we have a strong experienced technical team to ensure our excellent after-sales technical services to customers all over the world.

BUSINESS SCOPE



Equipment

Different types of Synthesizer,
Deprotection, Purification,
Dissolving, Pipetting, Drying



Consumables

Synthesis Columns/Plates,
Molecular Traps, Filters,
Other accessories



Raw Materials

Phosphoramidites,
Labelling Products,
Solid Support, etc

APPLICATION



Pharmaceutical
Companies



IVD
Companies



Oligo Service
CRO&CDMO



Research Institutes
University Labs

MAIN CUSTOMERS



生工 Sangon Biotech



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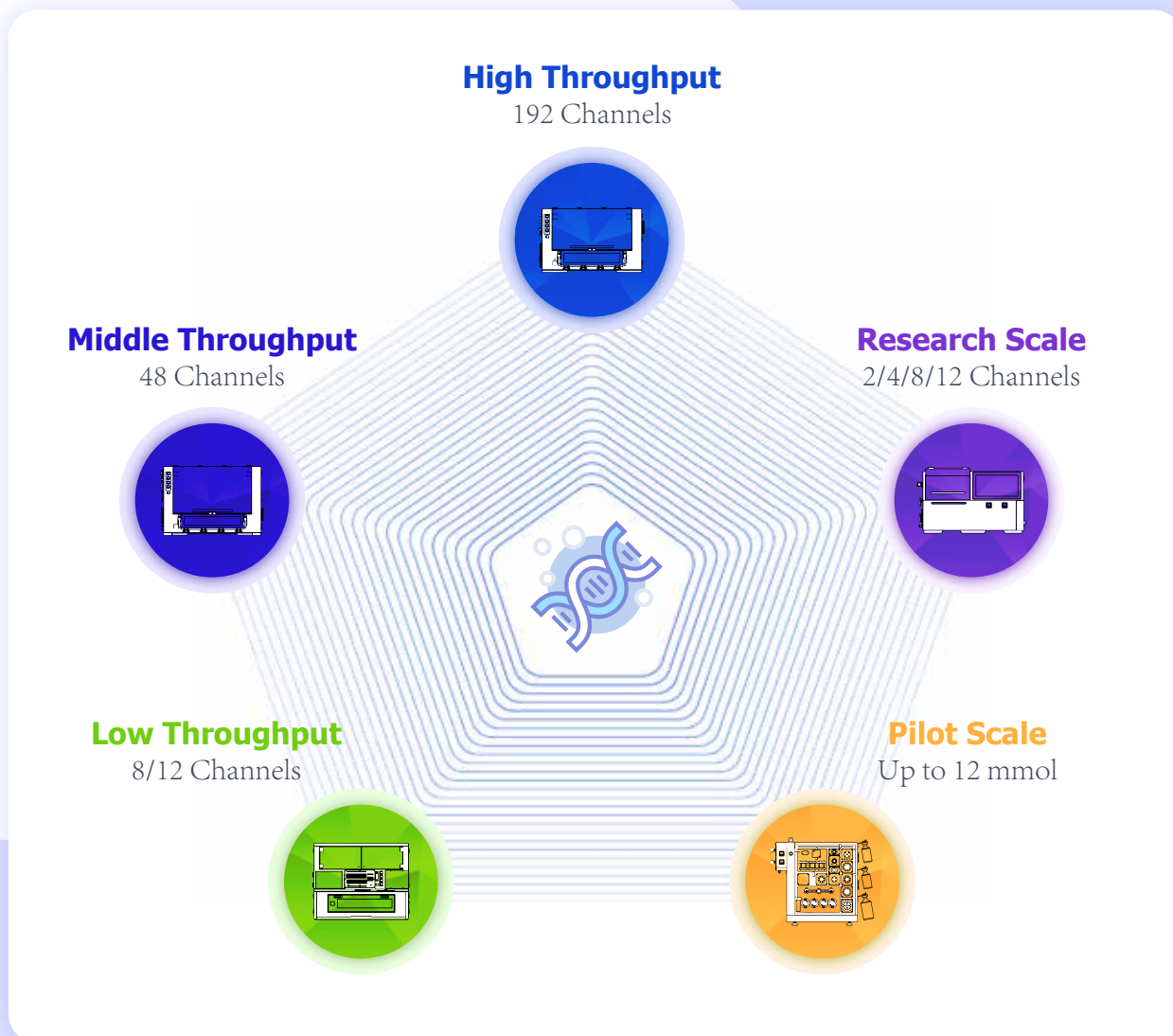
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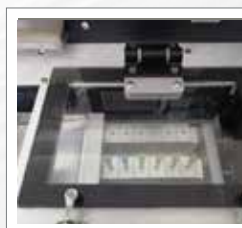
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Oligo Synthesizers for Different Scenarios



HY-12 OLIGO SYNTHESIZER



Optional Function:

Trityl Monitor

SPECIFICATION

Synthesis Channel	12	Synthesis Scale	25nmol–300umol
Amidite Position	Standard 12 sets Maximum 24 sets	Reagent Position	9 sets
Amidite Bottle & Cap	GL28 Screw Cap / Bayonet Cap for 10/30/60/240/480ml Bottle	Reagent Bottle & Cap	GL38/GL45 Screw Cap for 4L/2.5L/1L Reagent Bottle
Injection Drive	Positive Pressure by Protective Gas	Waste Drainage	Negative pressure by Vacuum Pump
Power Supply	Single Phase 220V	Product Type	DNA, RNA, LNA, Probe, Label, Thio, Modifiers, etc
Working Temperature	20°C ± 5°C	Relative Humidity	≤ 40%

HY-15 OLIGO SYNTHESIZER



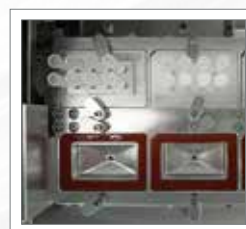
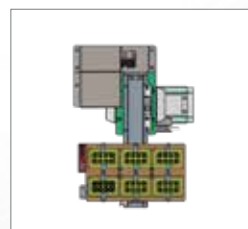
Optional Functions:

Trityl Monitoring
Integrated Deprotection

SPECIFICATION

Synthesis Channel	2、4、8	Synthesis Scale	50nmol–10umol
Amidite Position	4–10 sets	Reagent Position	7 sets
Amidite Bottle & Cap	GL28 Screw Cap for 10/30/60/240/480ml Bottle	Reagent Bottle & Cap	GL38/GL45 Screw Cap for 4L/2.5L/1L Reagent Bottle
Injection Drive	Positive Pressure by Protective Gas	Product Type	DNA, RNA, LNA, Probes, etc
Power Supply	110–230VAC, 50–60Hz	Working Temperature	20°C–25°C

HY-48 OLIGO SYNTHESIZER

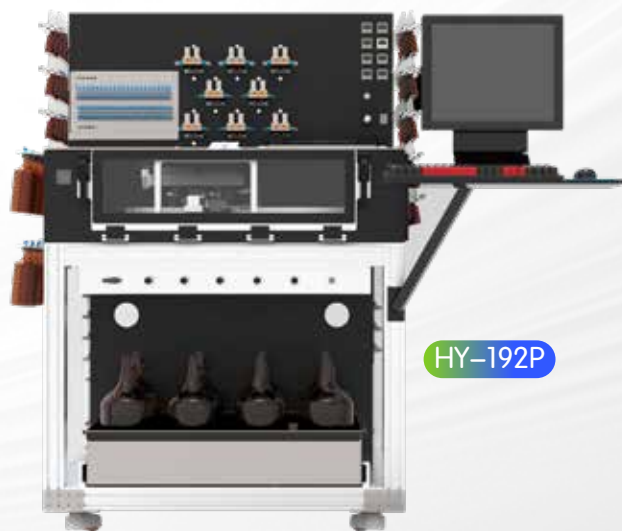


SPECIFICATION

Synthesis Channel	48	Synthesis Scale	5nmol–10umol
Amidite Position	Standard 12 sets Maximum 32 sets	Reagent Position	10 sets
Amidite Bottle & Cap	GL28 Screw Cap / Bayonet Cap for 10/30/60/240/480ml Bottle	Reagent Bottle & Cap	GL38/GL45 Screw Cap for 4L/2.5L/1L Reagent Bottle
Injection Drive	Positive Pressure by Protective Gas	Waste Drainage	Negative pressure by Vacuum Pump
Power Supply	Single Phase 220V	Product Type	DNA, RNA, LNA, Probe, Label, Thio, Modifiers, etc
Working Temperature	20°C ± 5°C	Relative Humidity	≤ 40%

HY-192 & 192P OLIGO SYNTHESIZER

HY-192



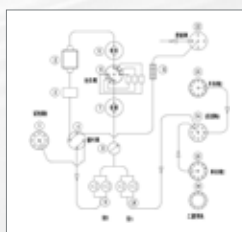
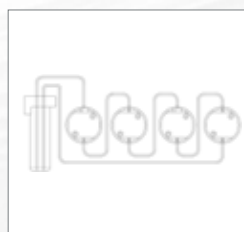
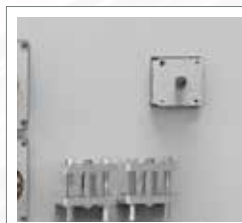
HY-192P



SPECIFICATION

Synthesis Channel	192	Synthesis Scale	5nmol–5umol
Amidite Position	Standard 8 sets Maximum 12 sets	Reagent Position	9 sets
Amidite Bottle & Cap	GL28 Screw Cap / Bayonet Cap for 10/30/60/240/480ml Bottle	Reagent Bottle & Cap	GL38/GL45 Screw Cap for 4L/2.5L/1L Reagent Bottle
Injection Drive	Positive Pressure by Protective Gas	Waste Drainage	Negative pressure by Vacuum Pump
Power Supply	Single Phase 220V	Product Type	DNA, RNA, LNA, Probe, Label, Thio, Modifiers, etc
Working Temperature	20°C ± 5°C	Relative Humidity	≤ 40%

HY-14 OLIGO SYNTHESIZER

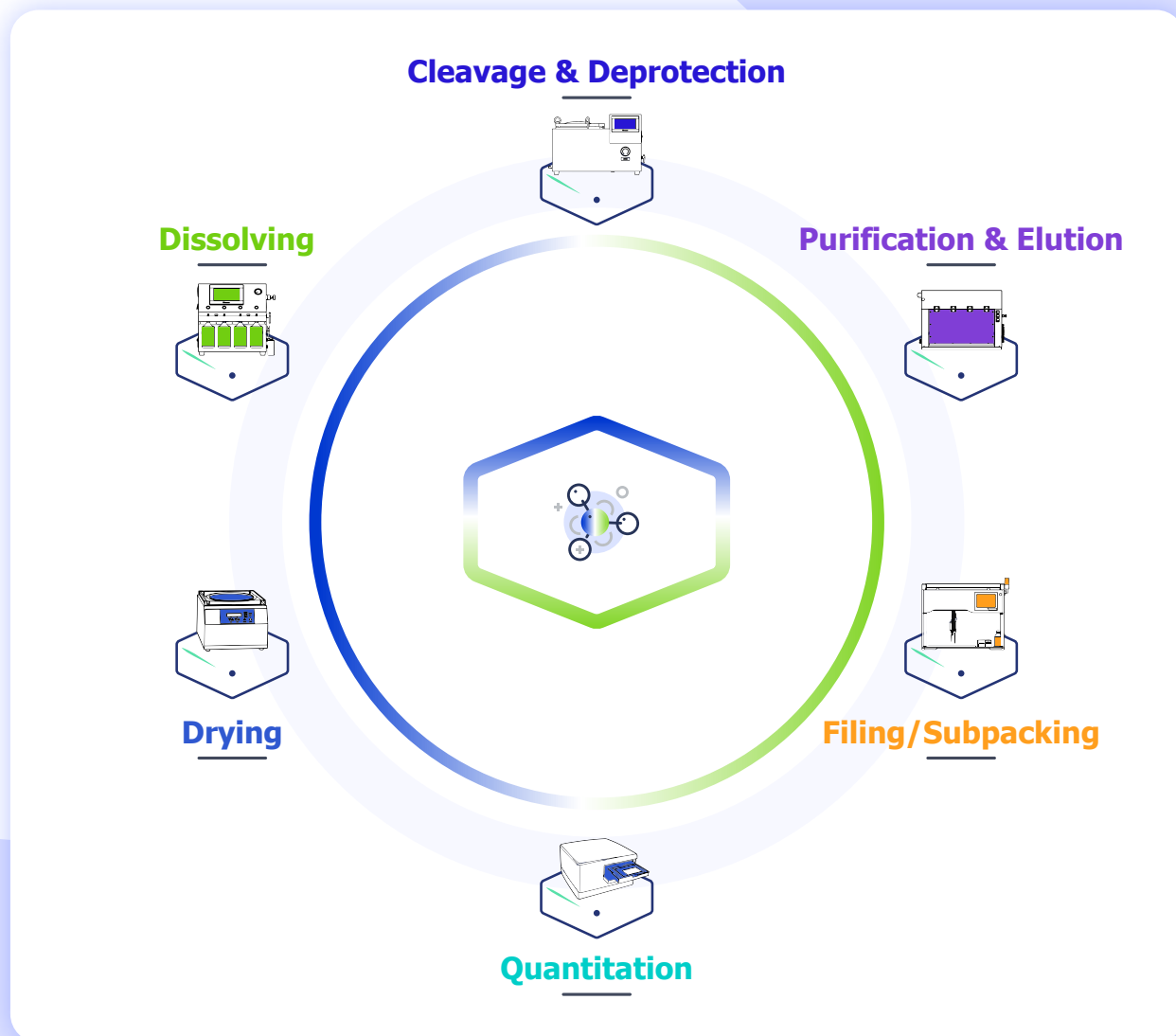


SPECIFICATION

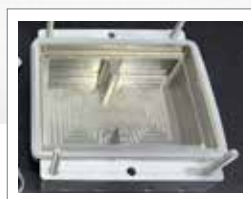
Peristaltic Pump	2 sets	Synthesis Scale	10umol–12mmol
Amidite Position	Standard 12 sets Maximum 16 sets	Reagent Position	10 sets
Amidite Bottle & Cap	GL28 Screw Cap / Bayonet Cap for 10/30/60/240/480ml Bottle	Reagent Bottle & Cap	GL38/GL45 Screw Cap for 4L/2.5L/1L Reagent Bottle
Maximum Flow Rate	180ml/min	Maximum Operating Pressure	25bar
Humidity Control	Dry Inert Gas	Pressure Supply for Inert Gas	5–10bar
Working Temperature	20°C ± 5°C	Relative Humidity	≤ 40%
Power Supply	110–230VAC 50–60Hz	Product Type	DNA, RNA, LNA, Probe, Label, Thio, Modifiers, etc



Accessory Equipment for Full Oligo Processing Process



HY-02 DEPROTECTION EQUIPMENT



SPECIFICATION

Working Method	Gasous Ammonolysis	Working Material	Ammonium Hydroxide/ Ammonia Gas
Rated Voltage	220V	Rated Power	1100W
Size	69*32*42cm	Inner Diameter	17cm
Working Pressure	0.5Mpa	Maxumum Pressure	0.8Mpa
Working Temperature	90℃ or custom	Maximum Temperature	120℃
Outside Material	304 Stainless Steel	Heating Tube Material	Aluminum
Working Capacity	Fits 2-4 96-column racks or plates	Working Condition	Ventilation in Fume Hood

HY-05 AMIDITE DISSOLVING EQUIPMENT



It is a dosing equipment that effectively prevents moisture in the atmosphere entering the amidite.

SPECIFICATION

Amidite bottle base up to 24pcs;

Independent valve for each tips;

Liquid Injection accuracy $\leq 5\%$;

The amount of bottles can be customized.

HY-07 MULTI FUNCTION WORKSTATION



SPECIFICATION

Suitable for 96-well plates, 2ml, 5ml, 10ml, 15ml, 50ml tubes, and standard tube racks;

There are 15 positions for whole work bench, each plates can be placed according to the customer's requirement;

With TECAN pipetting tips, ultra-high pipetting accuracy, two types of tips: 200ul, 1000ul;

PLC control, simple, intuitive and easy to operate, with a graphical user interface;

Multi-functional, liquid transfer, mixing, shaking, heating and capping etc;

With liquid level sensing function, which can sense the level of liquid in different tube.

HY-08 NUCLEIC ACID PURIFICATION EQUIPMENT



SPECIFICATION

4 working plates: purification elution plate, 96-well plate, pipette tip position, waste tip box;

8 reagent positions: each reagent with 8 injection heads. There are 5 reagents' injection heads can be controlled to inject separately and independently. And the other 3 reagents' injection heads are controlled to inject as a whole;

Positive pressure discharge: the reagent in the synthesis plate/purification plate comes down through the plates by the blowing gas, which can be adjusted in 3 different speed;

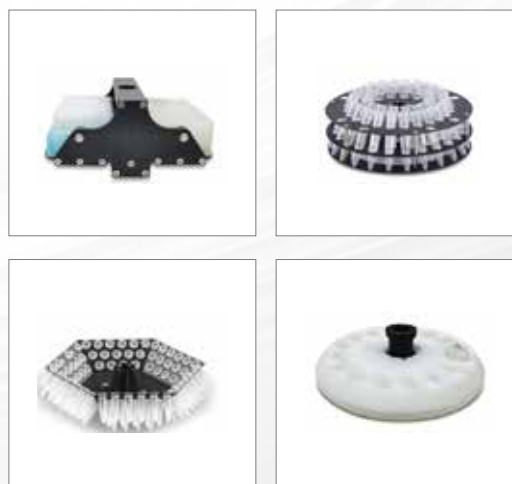
Pipetting mode: 96-channel pipette, which can transfer 96 samples from 96-well plates to the purification plate at the same time, using standard 200ul tips;

A 96-well plate can be placed below the purification elution plate, to collect the elution samples;

Compatible with most types of 96-well C18/OPC purification plates on the market;

Friendly software control system, the operator can edit, save and call the process file according to the process flow.

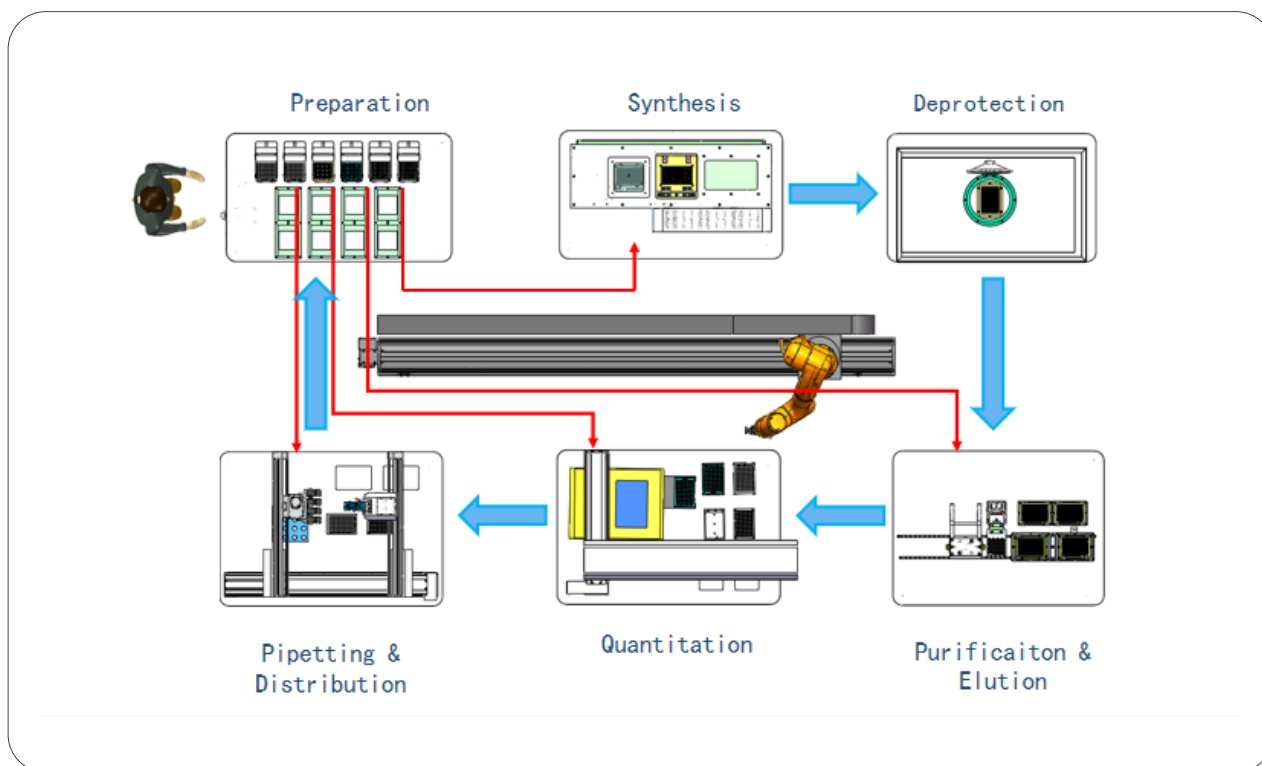
HY-13 VACUUM CENTRIFUGAL CONCENTRATOR



SPECIFICATION

Speed Range	300rpm~1500rpm	Total Power	400W
Max RCF	380 × g	Size	440 × 360 × 290mm
Time Range	0~9999min	Weight	23KG
Temp Range	RT~70℃	Power	AC220V 50/60Hz 10A
Noise	≤ 55dB(A)		

OLIGO SYNTHESIS AUTOMATION PRODUCTION LINE



The fully automated Module–realizable system, which can realize unmanned nucleic acid synthesis. Installed with multiple synthesis modules eg. automatic elution, purification, dispensing, reagents supply, waste draining and delivery modules etc. The amount of instruments per module can be customized.

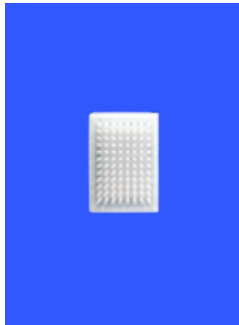
CONFIGURATION

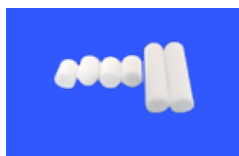
All the delivery of reagents and gas are controlled by integrated pipelines. Each reagents have its independent bottles position and in capacity of 10L~1000L according to their specifications. With liquid level sensor design for each reagent bottle, user can easily control and detect the liquid level.

It can deliver the 96 well plate automatically according to synthesis process. to providing efficient and cost–effective ways to perform synthesis operations.



OLIGO SYNTHESIS CONSUMABLES

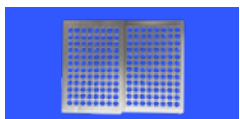
Empty column + Sieve plate		
Picture	Size	No.
	1ml	HY-H-1201
	3ml	HY-H-1203
	6ml	HY-H-1206
	12ml	HY-H-1212
	20ml	HY-H-1220
	30ml	HY-H-1230
	60ml	HY-H-1260
Universal Columns		
Picture	Size	No.
	25nmol	HY-H-614
	50nmol	HY-H-615
	100nmol	HY-H-616
	200nmol	HY-H-617
	500nmol	HY-H-618
	1 μ mol	HY-H-619
394 Columns		
Picture	Size	No.
	2.5cm	HY-H-817
	3.5cm	HY-H-818
	4.5cm	HY-H-819
96-Well Synthesis Plate		
Picture	Size	No.
	5nmol	HY-HCB-1005
	10nmol	HY-HCB-1010
	25nmol	HY-HCB-1025
	50nmol	HY-HCB-1050
	100nmol	HY-HCB-1100
	200nmol	HY-HCB-1200

Frit Columns		
Picture	Size	No.
	5nmol	HY-H-8805
	10nmol	HY-H-8810
	25nmol	HY-H-8825
	50nmol	HY-H-8850
	100nmol	HY-H-8100
	200nmol	HY-H-8200
	500nmol	HY-H-8500
	1 μ mol	HY-H-81000
MM6/MM12 Columns		
Picture	Size	No.
	25nmol	HY-Z-12-25
	50nmol	HY-Z-12-50
	100nmol	HY-Z-12-100
	200nmol	HY-Z-12-200
	500nmol	HY-Z-12-500
	1 μ mol	HY-Z-12-1000
Molecular Traps		
Picture	Size	No.
	2g	HY-H-913
	5g	HY-H-914
	10g	HY-H-915
	20g	HY-H-916
Filter		
Picture	Size	No.
	1/8	HY-H-812
	1/4	HY-H-813
	1/16	HY-H-824

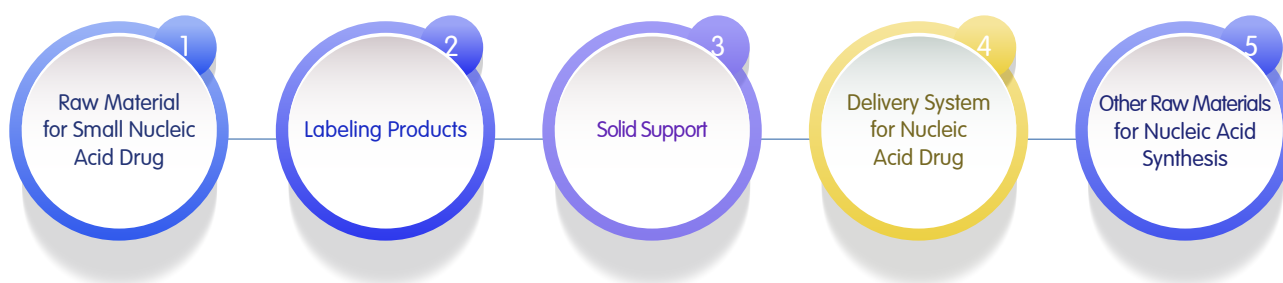


OLIGO SYNTHESIS ACCESSORIES

Phosphoramidite Bottle Caps		
Picture	Size	No.
	GL28	HY-H-832
Reagent Bottle Caps		
Picture	Size	No.
	GL38	HY-H-833
Bayonet		
Picture	Size	No.
	piece	HY-H-834
Connector		
Picture	Size	No.
	1/4NPT -1/4TUB	HY-H-893
Connector		
Picture	Size	No.
	1/8	HY-P-08-12
	1/16	HY-P-08-13
PTFE pipe		
Picture	Size	No.
	1/4	HY-H-882
	1/8	HY-H-883
	1/16	HY-H-884

Monomer bottle		
Picture	Size	No.
	500ML	HY-P-06-01
	250ML	HY-P-06-02
Cardboard bottle		
Picture	Size	No.
	30ML	HY-P-06-08
GL45 bottle		
Picture	Size	No.
	1000ML	HY-P-06-09
Lee valve		
Picture	Size	No.
	piece	HY-P-04-22
Electric valve		
Picture	Size	No.
	933	HY-P-03-29
Synthesis Plate		
Picture	Size	No.
	96 holes	HY-WX-38

OLIGO SYNTHESIS RAW MATERIALS



Raw Material for Small Nucleic Acid Drug

No.	Name	No.	Name
A7001	2'-OTBDMS-rA (Bz) Amidite	A7012	2'-OMe -rU Amidite
A7002	2'- OTBDMS-rG (iBu) Amidite	A8076	2'-OMe-rG (dmf) Amidite
A7003	2'-OTBDMS-rC (Ac) Amidite	A7013	2'-MOE-rA (Bz) Amidite
A7004	2'-OTBDMS-rU Amidite	A7014	2'-MOE-rG (iBu) Amidite
A8074	2'-OTBDMS-G (dmf) Amidite	A7015	5-Me-2'-MOE-rC (Bz) Amidite
A7005	2'-F-rA (Bz) Amidite	A7016	5-Me-2'-MOE-rU Amidite
A7006	2'-F-rG (iBu) Amidite	A7017	2'-MOE-rC (Bz) Amidite
A7007	2'-F-rC (Ac) Amidite	A7018	2'-MOE-rU Amidite
A7008	2'-F-rU Amidite	A8039	Beta-L-dG (iBu) Amidite
A8075	2'-F-rG (dmf) Amidite	A8040	Beta-L-dC (Bz) Amidite
A7009	2'-OMe -rA (Bz) Amidite	A8041	Beta-L-dT Amidite

No.	Name	No.	Name
A7010	2'-OMe -rG (iBu) Amidite	A8042	Beta-L-dA (Bz) Amidite
A7011	2'-OMe -rC (Ac) Amidite	HJ-H-50	DMT-dA (Bz) Phosphoramidite
HJ-H-510	DMT-dC (Bz) Phosphoramidite	A8044	5'-POM-vinyl phosphonate,2'-OMe-U CE-Phosphoramidite
HJ-H-511	DMT-dG (iBu) Phosphoramidite	A8060	2'-O-4'-C-Locked-rA (Bz) Phosphoramidite
HJ-H-512	DMT-dT Phosphoramidite	A8061	2'-O-4'-C-Locked-rG (dmf) Phosphoramidite
HJ-H-513	DMT-dC (Ac) Phosphoramidite	A8062	2'-O-4'-C-Locked-rT Phosphoramidite
HJ-H-514	DMT-dG (dmf) Phosphoramidite	A8063	2'-O-4'-C-Locked-5-Me-rC (Bz) Phosphoramidite
A8033	DMT-dI Amidite	A8080	2'-O-4'-C-Locked-rU Phosphoramidite
A8045	DMT-dU Amidite	A8081	2'-O-4'-C-Locked-rC (Bz) Phosphoramidite

Labeling Products

No.	Name	No.	Name
A8069	C2 Spacer Amidite	A8050	Biotin Phosphonate
A8025	C3 Spacer Amidite	A8085	Biotin TEG Amidite
A8026	C6 Spacer Amidite	A8073	Biotin-dT Amidite
A8027	C12 Spacer Amidite	C6003	3'-Biotin CPG
A8028	Spacer 9 Amidite	C6022	3'-Biotin C9 CPG
A8029	Spacer 12 Amidite	A8011	5'-Cholesteryl Amidite
A8030	Spacer 18 Amidite	A8047	5'-Cholesteryl-TEG Amidite

No.	Name	No.	Name
A8082	Spacer 20 Amidite	C6005	3'-Cholesteryl CPG
A8031	dSpacer Amidite	C6055	3'-Cholesteryl-TEG CPG (500Å)
C6016	3'-Spacer C3 CPG	C6056	3'-Cholesteryl-TEG CPG (1000Å)
C6017	3'-idSpacer CPG	A8057	5'-DBCO-TEG Phosphoramidite
A8038	5'-Biotin Amidite	A8059	5'-DBCO Amidite
A8079	DBCO-NHS ester	A8058	Alkyne-Modifier-dT-CE-Phosphoramidite
A8084	DBCO-dT Amidite	A8065	3'-Hexynyl-succinate
C6032	DBCO-C3 CPG	A8070	5'-Bromohexyl Phosphoramidite
A8092	5'-Amino C3 Modifier Amidite (TFA)	A8071	DDP-amidite
A8016	5'-Amino C6 Modifier Amidite (MMT)	A8086	Palmitic Aminohexanol Amidite
A8093	5'-Amino C12 Modifier Amidite (MMT)	A8087	5'-Tocopherol CE-Phosphoramidite
A8094	Amino-Modifier Serinol Phosphoramidite	C6004	DMT-PEG3 CPG
A8017	PDA-Amino-C6 Amidite	C6010	2',3'-ddC-CPG
A8018	5'-Amino-Modifier-C6-TFA CEP	C6011	3'-Phosphate-CPG
A8019	5'-Amino-C7-Amidite	C6012	3'-Amino-Modifier C7 CPG
A8020	5'-Carboxy Amidite	C6013	3'-Hexynyl-CPG
A8021	5'-Aldehyde-C2 Amidite	C6014	3'-Azido-CPG
A8022	5'-Acrydite Amidite (MethacrylateC6Amidite)	C6019	3'-PT Amino C6 CPG

No.	Name	No.	Name
A8023	5'-Phosphate-Amidite	C6006	3'-Thiol-Modifier C6 S-S CPG
A8068	CPR II	C6018	5'-Fluorescein CE Phosphora- midite (6-Fam Amidite)
A8024	5'-Butyne Amidite	C6024	FAM-dT Amidite
A8032	Fmoc Amino C6 dT	C6026	5'-Hexachloro-Fluorescein CE Phosphoramidite (6-HEX Amidite)
A8034	DMT-dT-Alkynyl Amidite	C6044	HEX-dT Amidite
A8043	5'-Thiol-Modifier C6 S-S Amidite	C6021	Yakima Yellow Phosphoramidite
A8046	5'-Ferrocene Amidite	A8001	3'-Cy3-CPG
A8048	Long Trebler Phosphoramidite	A8072	3'-Cy5-CPG
A8056	5'-Hexynyl CE Phosphoramidite	A8003	3'- (6-FAM) CPG (1000Å)
C6059	3'- (6-FAM) CPG (2000Å)	A8096	3'-Dabcyl CPG (DABCYL-C3-CPG)
A8051	5'-Dabcyl C3 Amidite	A8004	3'-Eclipse-CPG
A8052	5'-Dabcyl CE Phosphoramidite	C6001	3'-TAMRA CPG
A8053	Dabcyl-dT	C6002	MGB-CPG
A8064	internal ZEN Quencher	C6023	3'Iowa Black FQ CPG

Solid Support

No.	Name	No.	Name
C6015	3'-DMT-dT-CPG (Inverse T CPG)	C6025	Aminoalkyl-CPG (1000Å)
C6033	2'-OMe-rA (Bz) CPG (1000Å)	C6027	Universal-CPG (1000Å)

No.	Name	No.	Name
C6050	2'-OMe-rA (Bz) CPG (2000Å)	C6027-GC	Universal-CPG (1000Å)
C6040	2'-OMe-rC (Ac) CPG	C6028	Universal-CPG (500Å)
C6042	2'-OMe-rU CPG (1000Å)	C6028-GC	Universal-CPG (500Å)
C6060	2'-OMe-rU CPG (2000Å)	C6029-GC	Universal-CPG (2000Å)
C6043	2'-OMe-rG (iBu) CPG	C6030	Universal-CPG (3000Å)
C6058	2'-OMe-rG (dmf) CPG	C6030-GC	Universal-CPG (3000Å)
C6051	5'-DMT-dT-CPG 1000Å	C6038	Native CPG (500Å)
C6052	5'-DMT-dC (Ac)-CPG 1000Å	C6038GC	Native CPG (500Å)
C6053	5'-DMT-dA (Bz)-CPG 1000Å	C6039	Native CPG (1000Å)
C6054	5'-DMT-dG (dmf)-CPG 1000Å	C6039GC	Native CPG (1000Å)
C6041	Aminoalkyl-CPG (500Å)		

Delivery System for Nucleic Acid Drug

No.	Name	No.	Name
A8088	Tri-GalNAc (OAc) 3 Cbz	C6031	3'-GalNAc CPG (1000Å)
A8089	Trans-3 Cbz	C6049	3'-GalNAc CPG (500Å)
A8090	Peracetylated GalNAc Pentenoic Acid	C6057	GalNAc C3 CPG
A8091	GalNAc C3 Amidite		

Other Raw Materials for Nucleic Acid Synthesis

No.	Name	No.	Name
A8035	Sulfurizing Reagent IV	A804	5-乙硫基四唑

Honya Biotech

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