



MERMADE OLIGO SYNTHESIZER



PT ECOSAINS HAYATI

Accommodate your satisfaction in laboratory experiences

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🌐 Ecos LabStore

Eco-Sains

We Offer

- **Excellent product in wide range application**

General Laboratory Equipment
 Analytical Measurement Equipment
 Life Science Equipment

We

- **Commit to serve with sincere heart**

Friendly sales team
 Favorable staff member

We Are

- **Official distributor for famous brand names**

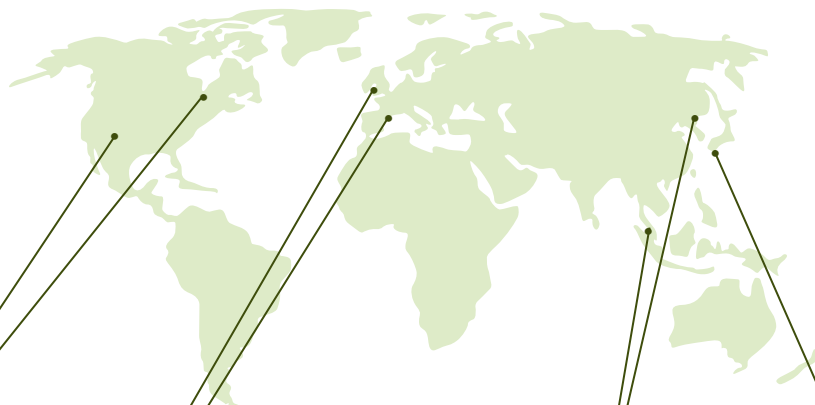


OUR TEAM

- Application Scientist
- Sales Marketing
- Sales Engineer
- Logistic



We accomodate your satisfaction in laboratory experiences



USA



Pocket Testers
Smart Pocket Testers Solutions
Portable Meters
Portable pH Meters for industrial Applications
Accessories
Benchtop Meters
Electrodes/ Probes



DNA Synthesizer & Custom Oligos



CRISPR Gene Editing
Cloning Kits & Vectors
Competent Cells
Enzymes
In Vitro Transcription
Next Generation Sequencing
Nucleic Acid Extraction and Purification
PCR & Amplification
Protein Expression
Transposon Mutagenesis

CANADA

TECTA - PDS

Tecta - Model B16
Fully Automated Microbiology Systems

UNITED KINGDOM



Block Heater
Colony Counter
Water Bath
Incubator
Flocculator
Microcentrifuge
Heating Mantles
Homogenizer
Hotplate/Stirrers
Overhead Stirrers
Vortex Mixer
Melting Point
Recirculating Cooler
Water Stills
Rollers
Rotary Evaporator



Spectrophotometer
Colourimeter
Fluorimeter
Flame Photometer
pH Meter
Conductivity Meter
DO Meter



Thermal Cycler
Dri Block Heater
Thermoregulator
Gelatin Time
Sample Concentrator
Sample Cooling
Hybridisation
Incubator
qPCR & Reagents



Thermal Cycler
qPCR & Reagents



DNA Extraction KIT
2 Way Step Only 3 Minute

GERMANY



Photometer
Pooltester
Test Strips
Electronic Meters
Comparator-Kit
Special Processes
Balanced Water Kits
Bacteria Testing Reagents



Bubble Pressure Tensiometer
Dynamic Foam Analyzer
Drop Shape Analyzer
Drop Volume Tensiometer
Foam Tester
High Pressure Foam Analyzer
Force Tensiometer
Mobile Surface analyzer
Ross Miles Foam Analyzer
Spinning Drop Tensiometer
Surface Roughness Analyzer
Surface Roughness Testes
Top View Analyzer

NETHERLANDS



UPRIGHT Microscopes
STEREO Microscopes
INVERTED Microscopes
PHASE CONTRAST Microscopes
FLUORESCENCE Microscopes
POLARIZATION Microscopes
DARKFIELD Microscopes
DIGITAL SOLUTIONS Cameras & Tablet cameras
ILLUMINATION SOLUTIONS For stereo microscopy
MAGNIFIERS & MEASURING Microscopes
Q-SCOPE Handheld USB Microscopes

DENMARK

DNA DIAGNOSTIC
Screening Kits for Leukimia associated Translocations

HUNGARY



Pens
Pro Testers
PRO Meters
PRO Monitors
Refractometers
Photometers
Mini Titrators
Replacement Probes
Solutions and Care Kit

SINGAPORE



Portable & Handheld Spectrophotometers
Photopette® Cells
Photopette® Bio
Photopette® Turbidity
Photopette® OD600
Photopette® Custom

KOREA



Laboratory Scale
• MN230A
• MN400BF
Semi Production
• MN600P
Product Scale
• MN100/200/300
• Es Series

JAPAN



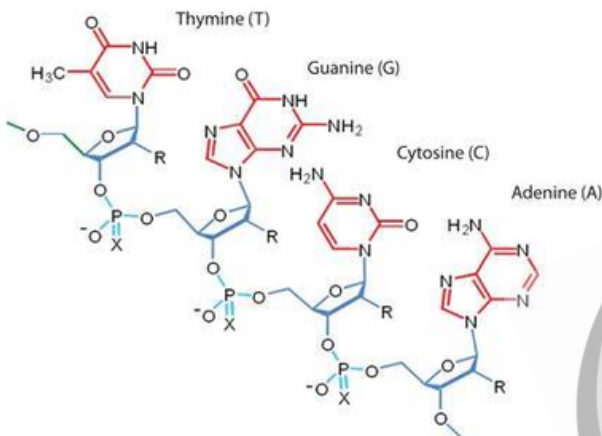
Nitrogen Tank
Freezers
Chest Freezers
Lab Refrigerator

Haier Biomedical

- 150 C Cryo Freezer
- 86 C ULT Freezer
- 60 C Biomedical Freezer
- 40 C Biomedical Freezer
- 30 C Biomedical Freezer
- 25 C Biomedical Freezer

Combined Refrigerator and Freezer
Pharmacy Refrigerator
Under Counter Pharmacy - Refrigerator
Spark Free Refrigerator/ Freezer
Blood Bank Refrigerator
Laboratory Refrigerator
Constant Temperature-Transport Cooler



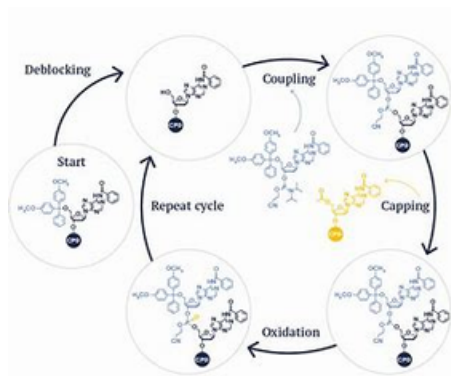


OLIGONUKLEOTIDA

Oligonukleotida (oligo) merupakan untai tunggal pendek dari DNA sintetis atau RNA sintetis, yang menjadi *starting point* untuk berbagai macam aplikasi di bidang biologi molekuler dan biologi sintetis

Bagaimana oligo dibuat ?

Oligos dibuat dengan menggunakan alat **oligo synthesizer**, dengan melalui 4 step pada setiap siklus sintesis oligos.



Aplikasi

- Diagnostik dan terapi
- *High-throughput screening*
- Sintesis gen
- *Genetic diagnostic test kit*
- PCR/qPCR
- siRNA/RNAi
- miRNA
- CRISPR Cas9
- Sekuensing DNA/RNA

Seberapa penting memiliki oligo synthesizer

Dengan memiliki *oligo synthesizer* maka Indonesia dapat mandiri dalam membuat *qPCR kit reagen detection*, sehingga dapat dengan cepat menanggulangi pandemi yang ada. Dapat juga mempercepat *research* yang dilakukan oleh peneliti di Indonesia



MERMADE OLIGO SYNTHESIZER

MerMade Oligo Synthesizer

MerMade Oligo Synthesizer merupakan suatu alat yang digunakan untuk memproduksi oligos, yang dapat digunakan pada banyak bidang aplikasi



MerMade dapat mensintesis

- DNA RNA, dan LNA
- Antisense
- Phosphorothioates
- Dual-labelled probes
- 2'O-Methyl and others

NUCLEID ACID THERAPEUTIC

- Antisense
- siRNA Aptamers
- miRNA
- Immunostimulatory
- CRISPR

MDx

- Probes
- Primers
- Modified Oligo
- Barcodes Oligo
- Pools

AgBio

- Probes
- Primers
- Modified Oligo
- Barcodes Oligo
- Pools

- Drugs
- Diagnostics
- Personalised
- Medicine
- Disease detection
- Gene Profiling
- Forensics
- Research

APLIKASI MERMADE

MerMade Oligo Synthesizer telah digunakan pada berbagai bidang, baik *research*, deteksi, maupun produksi

The Acceleration of Building Local/Regional Capabilities – Vaccines



BioTech's Investment in Singapore looks beyond COVID-19: Chan Chun Sing

BioTech Recognizes Employees and Partners for Their Support in Developing Historic Vaccine

The Acceleration of Building Local/Regional Capabilities - MDx



Home-grown firms linked to pandemic work will continue to attract demand, investments

S'pore could soon make freeze-dried Covid-19 PCR test kits

The Acceleration of Building Local/Regional Capabilities – Therapeutics



Nucleic acid therapeutics: Riding the wave of mRNA

FDA approves Novartis Leqvio® (inclisiran), first-in-class siRNA to lower cholesterol and keep it low with two doses a year



RANGE PRODUK MERMADE OLIGO SYNTHESIZER

Aplikasi yang luas pada bidang oligo, menjadikan **MerMade** memiliki banyak produk **oligo synthesizer**, yang dimaksudkan agar konsumen mendapatkan alat sesuai dengan kebutuhannya.

	MM-4	MM-6	MM-12	MM-48X	MM-96E	MM-192X	MM-192E
Number of oligos synthesized without User intervention	4	6	12	48	96	192	192
Number of oligos synthesized Simultaneously	4	6	12	48	96	192	192
Number of 20 mers produced in a given time	4 in 2.5 hours with double coupling and deblock	6 in 3 hours	12 in 3.5 hours	48 in 3 hours	96 in 2.5 hours	192 in 3.5 hours	192 in 3.5 hours
Scale Range	50nmol to 5umol	50nmol to 200umol	50nmol to 200umol	50nmol to 5umol	50nmol to 5umol	50nmol to 5umol	50nmol to 5umol
Number of amidite position	10	10 to 24	10 to 24	20 - 24	12	10 to 64	4 to 8
96 well format					*	*	*
Trityl Monitor	*	*	*				
Column or plate synthesis				*		*	*
Efficient reagent use	*	*	*	*	*	*	*
Dedicated Thio Bottle	*	*	*	*	*	*	*
Computer and software included and pre-configured	*	*	*	*	*	*	*
World Wide Service	*	*	*	*	*	*	*
DNA & RNA protocols	*	*	*	*	*	*	*



MerMade 4 (MM4)

🏢 Research Lab
🏫 Akademik



MerMade 96/192E

🏭 Oligo manufacture
🏢 Pharmaceutical



MerMade 6/12 (MM6/12)

🏭 Pharmaceutical
🏢 Molecular diagnostics



MerMade 192X

🏭 Oligo manufacture
🏢 Pharmaceutical



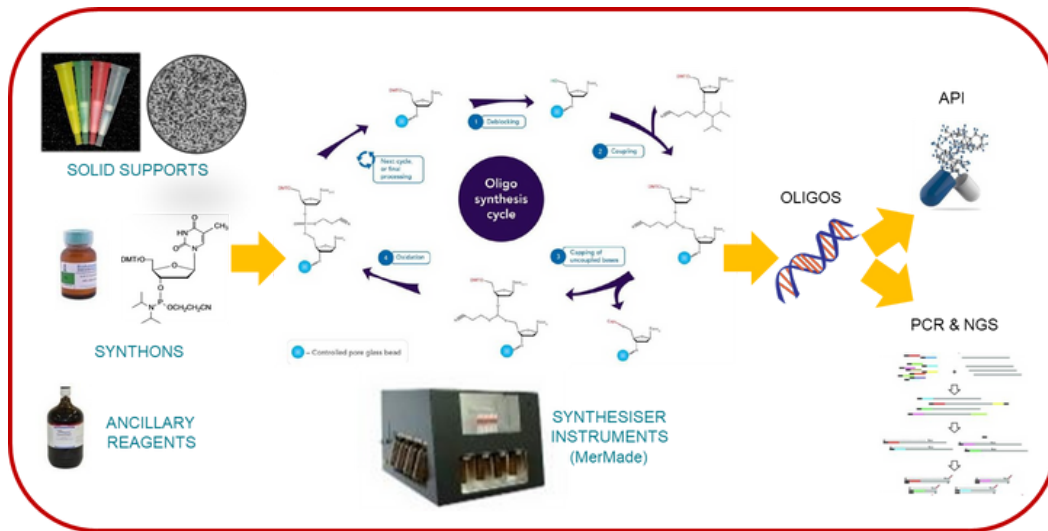
MerMade 4 (MM4)

🏢 Small scale research lab
🏭 Pharmaceutical
🏢 Molecular diagnostics

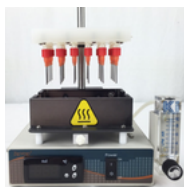


PROSES SINTESIS OLIGONUKLEOTIDA

Sintesis oligonukleotida akan melalui dua tahapan, yaitu sintesis dan *post* sintesis. Pada *post* sintesis, oligo yang didapatkan akan dimurnikan dan dicek kualitas dan kuantitasnya dengan menggunakan beberapa *equipment*.



POST SYNTHESIS EQUIPMENT



EVAPORATOR

digunakan untuk menguapkan bahan pelarut



RP-HPLC

digunakan untuk memurnikan oligo hasil sintesis



NANO SPECTROPHOTOMETRE

digunakan untuk mengukur oligo secara kuantitatif



FREEZE DRYER

Menjadikan oligo dalam bentuk serbuk, agar dapat disimpan dalam suhu ruang saat pengiriman



LC-MS

digunakan untuk pengecekan kualitas oligo. Pada tahapan ini dapat dilihat apakah panjang dan urutan basa oligo yang dibuat sudah sesuai



INSTALLED BASE

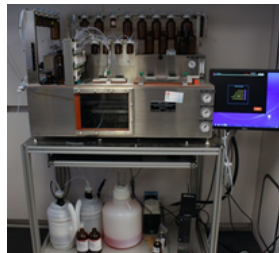
MerMade oligo synthesizer telah terinstal diberbagai negara dan diberbagai bidang, mulai dari universitas sampai, lembaga penelitian, sampai dengan produsen oligo

IOWA STATE UNIVERSITY



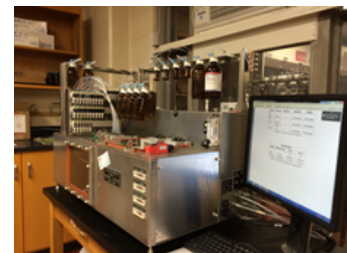
MerMade 192

Nano
Med
Fab



MerMade 12





YORK
UNIVERSITÉ
UNIVERSITY



MerMade 12

LGC BIOSEARCH

LGC merupakan mitra terpercaya untuk 10 perusahaan diagnostik molekuler teratas dunia, mendukung setiap tahap pengembangan pengujian mulai dari penemuan *biomarker* hingga komersialisasi. Membantu pengembang dan laboratorium klinis untuk melaksanakan proyek mereka di seluruh spektrum, termasuk *point of care-assay*, penelitian penyakit menular, atau diagnostik kanker.

sample prep	oligos and probes	enzymes	master mixes
 <p>DNA and RNA Extraction Kits (crude extract) DNA and RNA Purification Kits (precipitation based) DNA Purification Kit from Human Blood (mag-bead based)</p>	 <p>RUO oligos PilotDx Program GMP oligos BHQ Probes Labels BHQ Probes Quenchers</p>	 <p>DNA and RNA Polymerases Reverse Transcriptases Enzymes for Isothermal Amplification Ligases (standard and thermostable)</p>	 <p>PCR-Mixes Isothermal Amplification Mixes</p>

