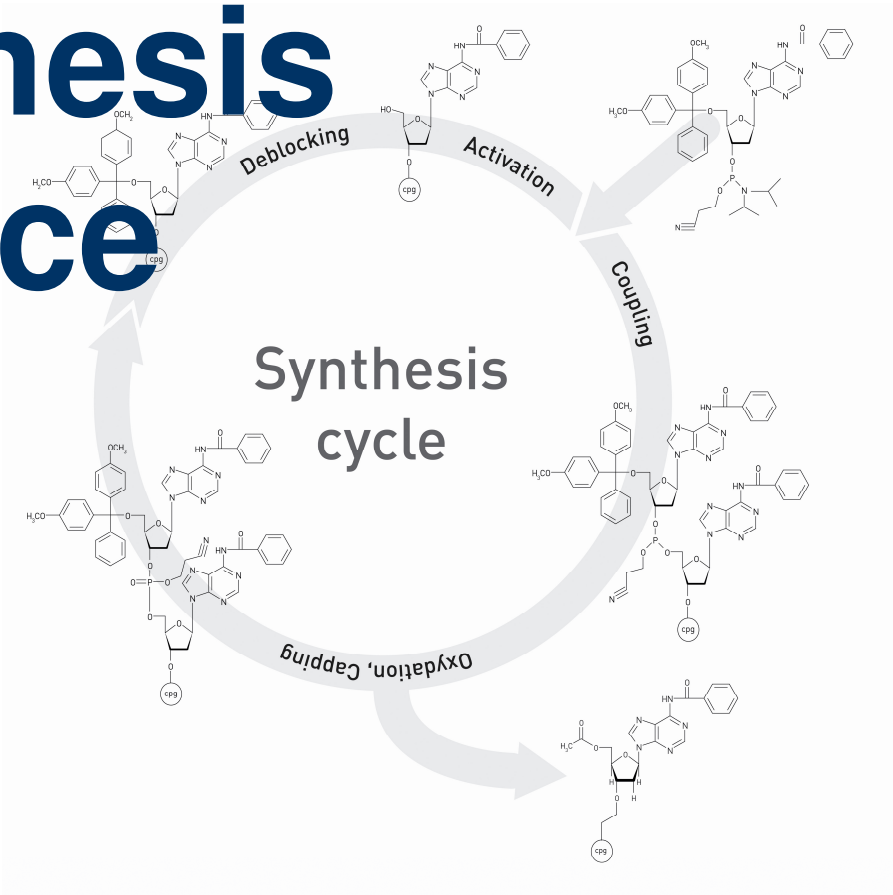
Custom Oligonucleotide Synthesis Service



Your Reliable Oligo Partner

EUROGENTEC AIT

EGT GROUP

ONE-STOP-SHOP OLIGO SUPPLIER

• All types of oligonucleotides, from 2 to 150 bases long for DNA, and 2 to 80 for RNA.
• More than 80 types of modification
• All types of synthesis scale, from µg to gram amounts
• Largest line of fluorescent probes for Real-Time applications
• RNA interference products, including siRNA

SUPERIOR QUALITY

• Optimized chemistry, salt-free delivered products
• Stringent quality control (QC), including MALDI-TOF mass spectrometry for every oligo

RELIABLE SERVICE

• Fully automated synthesis
• Fast turnaround times
• Technical and scientific assistance assumed by experienced scientists
• High-capacity and flexibility
• Parallel synthesis up to 600 oligos per day in Singapore & 10,000 oligos per day in other parts of the world.
• Easily scalable up to 300 grams, even under cGMP quality

GET THE BEST QUALITY FOR YOUR DAILY WORK

Type	Length (base)	Synthesis scale	Purification	Yield	Delivery format	Delivery time
Gold oligos	14 – 49	50-1000 nmole	Desalted	5 – 30 OD	Solution at 100uM or lyophilized	1 – 2 working days
Platinum oligos	50 – 80	50-1000 nmole	Cartridge purified	2-15 OD	Solution at 100uM or lyophilized	3 – 5 working days

* Purification options available: Reverse-phase cartridge purification, HPLC purification, PAGE purification and double step ultrapure purification.

Besides our GOLD and PLATINUM oligos, you can also choose to synthesize your oligos by ordering specific scale, purification and modification.

RELIABLE & CONSISTENT FOR YOUR HIGH-THROUGHPUT WORK

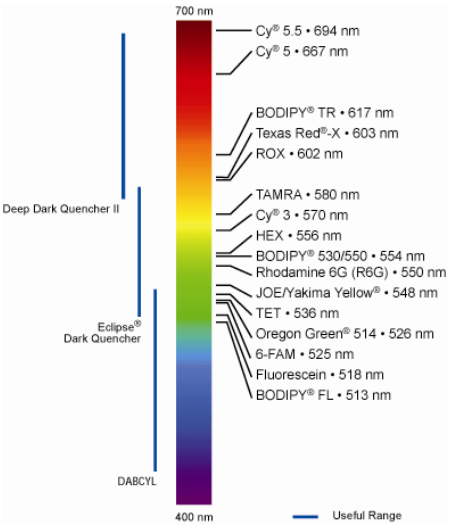
- High-throughput oligos in 96 well plate format
- Supplied in solution or lyophilized form
- Unlabelled or labeled
- Use for applications like: DNA microarray, DNA sequencing, PCR projects, Anti-sense screening, SNP analysis, etc.

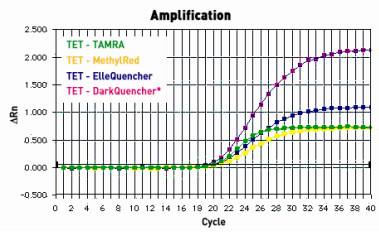
PROBES FOR QUANTITATIVE, REAL-TIME PCR

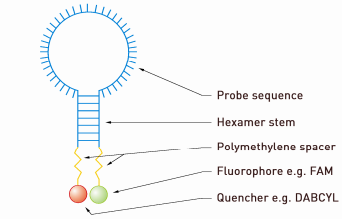
We offer high-quality probes for quantitative, real-time PCR. The following probes are available:

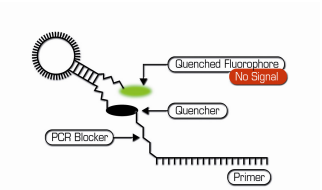
- Double-dye oligonucleotide probes
- Hybridization probes
- Molecular beacon probes
- Scorpions™ probes

Multiplexing is often a question difficult to address and the choice of the correct fluorophore dyes combination is therefore crucial. We offer a wide range of fluorescent dyes and quenchers as well as consultation for our customer to make multiplexing an easier task.









OTHER MODIFICATION

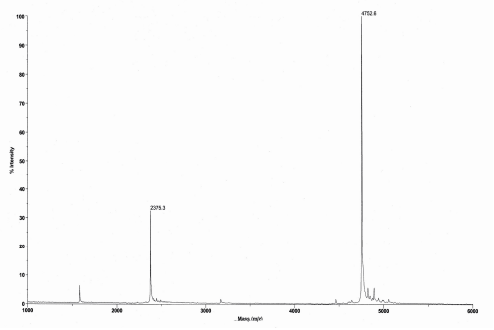
Your work is our concern. We have a wide selection of modification catered to your different needs.

Application Chart

Application	Modification
Abasic sites	Amino modifier, dSpacer
Antisense studies	2'-O-methyl ribonucleotides, phosphorothioates, LNA, PNA, siRNA
Crystallography and Crosslinking studies	Halogenated bases
Direct Ligation	Phosphate
DNA repairs studies	Phosphate, 5-dihydro-dU, 8-Br-dG, 8-oxo-dA, 7-deaza-dG, 6-Me-dG, 7-deaza-dA
Hybridization	Fluorescent dyes, Biotin, Digoxigenin, 2,4-Dinitrophenyl, Degenerate bases (wobbles), universal bases
Increment of cell permeation	Cholesterol, Acridine, Psoralen
Microarrays	Amino modifiers, Acrydite
Mini Sequencing/Genotyping	Fluorescent dyes
Oligos for conjugation reactions	Amino modifiers, Glyceryl, Biotin, Thiol
Oligos for use with antibodies	Digoxigenin, 2,4-Dinitrophenyl, 5-Bromo dU
Prevention of 3' to 5' exonuclease	Phosphate, Amino modifier, 3'-spacer, Acridine, 3'-dC or 2'3'-ddC
Quantitative, real time PCR: Dual-labeled probes, Molecular Beacons, Scorpions etc	Fluorescent dyes (Cy® 3, Cy® 3.5, Cy® 5, Cy® 5.5, FAM, HEX, TET, Fluorescein, R6G, ROX, JOE, Texas Red®, Yakima Yellow®, Alexa Fluor® dyes) and quenchers (TAMRA, Dabcyl, DDQI, DDQII)
Others	Spacer Modifiers, Acrydite, Degenerated bases, universal bases, inosine

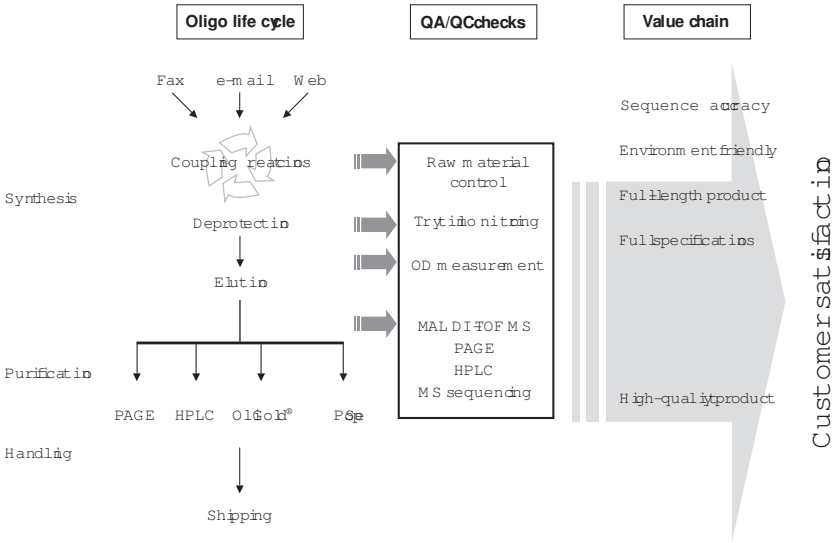
QUALITY CONTROL

- Raw materials: All reagents used for oligo synthesis come from reliable suppliers, and each lot is extensively QC checked prior to use.
- Online trityl monitoring: Online trityl monitoring of all oligos were performed to control coupling efficiency at each cycle.
- OD measurement: All oligos are routinely analyzed by optical density (OD) measurement.
- MALDI-TOF Mass Spectrometry or PAGE: Most unmodified and all modified oligos (up to 60 bases) are analyzed by **MALDI-TOF mass spectrometry**. Longer oligos are usually controlled by PAGE analysis.



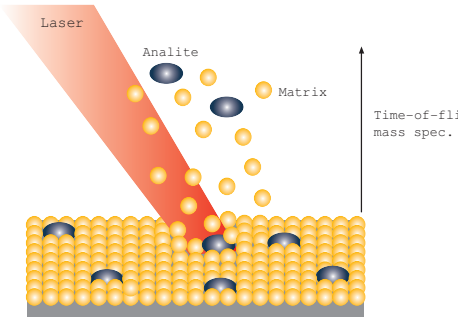
Routine MALDI-TOF Mass Spectrometry (MS) analysis of a standard 21 mer sequence. The 21 mer was not purified prior to analysis.

Any oligo that fails to meet our specifications is resynthesized. The result of our stringent QC process is a high-quality oligonucleotide. Your result is our concern.



What is MALDI-TOF Mass Spectrometry ?

MALDI-TOF MS (matrix assisted laser desorption/ionization time of flight mass spectrometry) is an analytical method that allows the detection of the composition of various biological components, such as oligonucleotides. A molecule is embedded in a matrix on a metal surface and desorbed into the gas phase inside the machine by the force of a laser beam. An electric field accelerates the probe. The samples are classified by their weight, which is determined by the amount of time it takes to pass through the drift tube.



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