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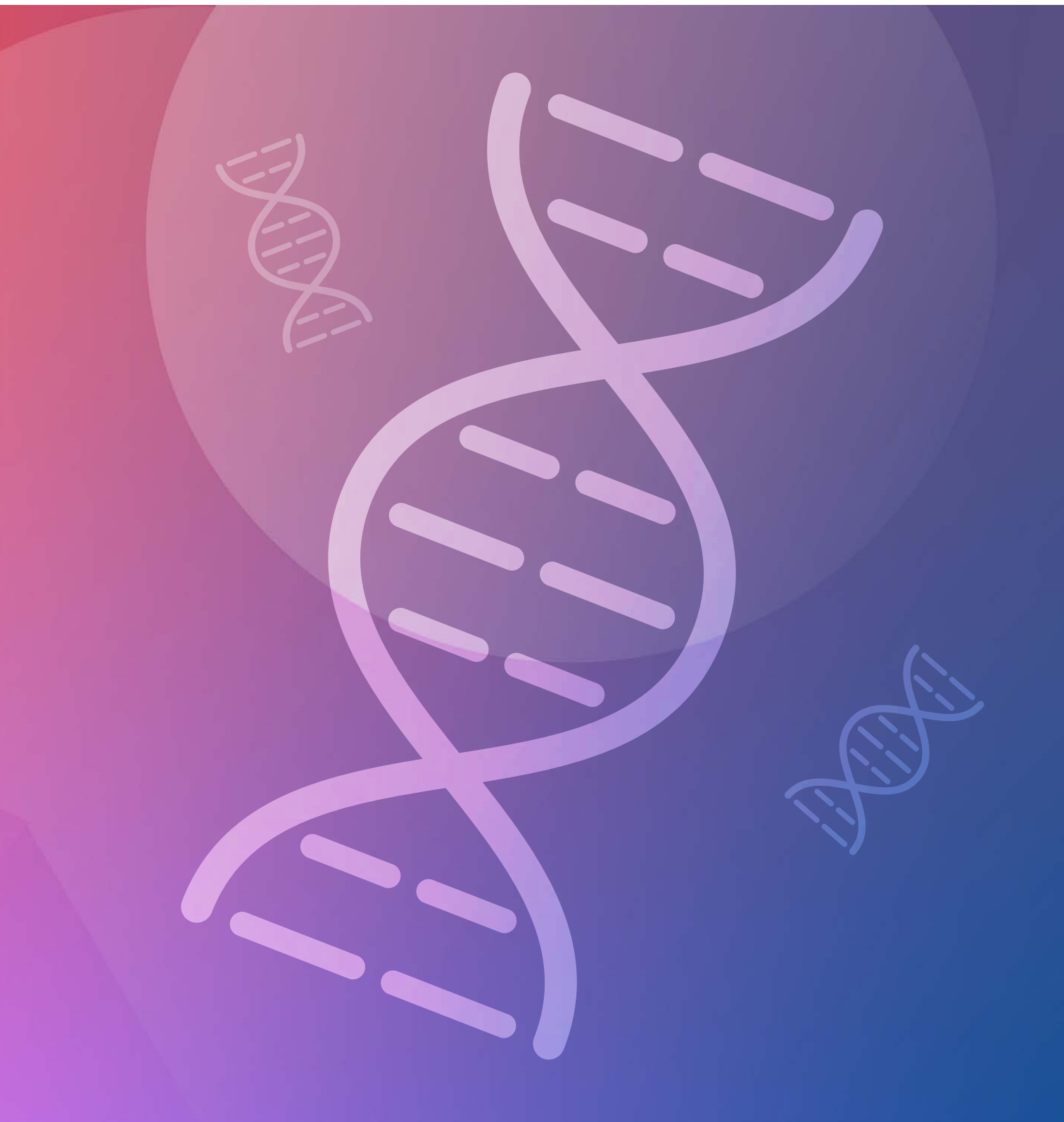
RAW MATERIALS

Raw Materials for molecular diagnostic



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RAW MATERIALS

Certest Raw Materials provides high quality solutions for developing and manufacturing your Molecular Diagnostic IVD assays.

Our expertise in **primers & probes synthesis and purification, molecular biology enzymes manufacturing and dsDNA synthesis** offers to our customers a priceless support in their challenging projects.

All these items are already being used by our Viasure division in all their IVD products with excellent results.

Additionally, we also **manufacture our own fluorophores & quenchers** that allows us to have the best tools available and the proper knowledge for manufaturing your customized probes in a competitive time.

Our experience with qPCR diagnosis has helped us to better understand the challenges to provide specific products to specialized customers.

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Molecular Diagnostic IVD assays

Strengths

qPCR experience

Certest Raw Materials has quickly evolved and improved to respond Molecular Diagnostics needs.

Specific products for specialized customers

Certest Raw Materials provides high quality products fully adapted to our customers, with technical support to assist you in your qPCR assays.

Lyophilized final products

To guarantee high quality and stable products which last for up to 24 months.

Fast delivery

We process and deliver customer orders in an extremely short time to any destination. We are flexible and customer-oriented.

1. Molecular Biology enzymes & Hot Start PCR mAbs

Optimized molecular biology enzymes for qPCR applications (DNA Taq polymerase and Reverse Transcriptase) and anti-Taq DNA polymerase monoclonal antibodies (qPCR hot start system) for your qPCR assays.

1.1. Molecular Biology Enzymes

MT-25RT2	Reverse Transcriptase (RT2) Glycerol free (250.000 u)
MT-25TAQ	Thermus aquaticus (Taq) polymerase Glycerol free (50.000 u)
MT-25TAQk	Thermus aquaticus (Taq) polymerase without 5'3' exonuclease activity Glycerol free (25.000 u)
MT-25T4L	T4 DNA Ligose · **Coming soon!**
MT-25T4K	T4 DNA Polynucleotide Kinase · **Coming soon!**

1.2. Hot start PCR monoclonal antibodies

MT-16TQ01	Anti-TAQ polymerase mAb (clone TQ01) (x1mg)
MT-16TQ32	Anti-TAQ polymerase mAb (clone TQ32) (x1mg)

Lyophilized molecular biology enzymes kits also available

MT-E27RT	Kit Reverse Transcriptase (RT2), lyophilized (50000 U)
MT-E27TAQ	Kit Thermus aquaticus (Taq) polymerase, lyophilized (5000 U)
MT-E27TAQk	Kit Thermus aquaticus (Taq) polymerase without 5'-3' exonuclease activity, lyophilized (5000 U)

2. Master mix

Optimized real time qPCR master mixes. Choose the most suitable master mix, liquid or lyophilized for your DNA or RNA qPCR assays.

2.1. DNA qPCR Master Mix

MT-25MXD01	Liquid DNA Master Mix Hot Start (100 reactions)
MT-E27MXD01	Lyophilized DNA Master Mix Hot Start (50 reactions)

2.2. RNA RT-qPCR Master Mix

MT-25MXR01	Liquid RNA Master Mix Hot Start (100 reactions)
MT-E27MXR01	Lyophilized RNA Master Mix Hot Start (50 reactions)

3. Primers

Prevalent range of length is 12 mer up to 200 mer, purification method desalting, cartridge or HPLC and any production scale could be provided.

We also provide single stranded RNA substituted in C2 by -H or -OMe. We synthesize oligonucleotides using high quality CPG support and amidites from world leading suppliers.

3.1. ssDNA unsubstituted

Single stranded unsubstituted DNA for your qPCR assays.

	Length	Purification Methods	Quantity (nmol)
OL-PRIMER	(12-50 mer)	Desalted / Cartidge / RP-HPLC	50 / 200 / 1000
OL-ULDNA	(50-200 mer)	RP-HPLC	50 / 200 / 1000

3.2. ssRNA substituted in C2' (-H, -OMe)

	Length	Purification Methods	Quantity (nmol)
OL-MRNA	(12-50 mer)	RP-HPLC	50 / 200 / 1000

4. dsDNA Blocks

Double stranded DNA, suitable as positive controls for your PCR assays. Products available in liquid & lyophilized format from 100 to 3000 pb. Choose the most suitable one for your RT-qPCR positive controls.

		Length
OL-DSDNA	Liquid dsDNA blocks	(100-3000 pb)
OL-DSDNA-L	Lyophilized dsDNA blocks	(100-3000 pb)

5. Probes

Any quantity (nmol) : 50, 200, 1000... Purified by RP-HPLC.

Prevalent range of length is 12 mer up to 50 mer for probes.

5.1 Hydrolysis Monoquenched/Doublequenched Probes

Most common Dual-Labeled probes for qPCR. During PCR, the target-bound probe gets hydrolized by the enzyme activity realising the fluorophore (FAM, HEX, ROX, TxR and Cy5) and quencher (BHQ, Eclipse,...).

	Modification 5'	**Modification 3'**
OL-PROBE	FAM / HEX	BHQ-1 / CBQX
	ROX / TxR / Cy5	BHQ-2 / CBQX2 / CBQx3

5.2 Biolocked Hydrolysis Probes (Locked Nucleic Acids Probes)

These probes are usually used for mutant and wild type strains detection but it can be used for other applications. Their bases are substituted by locked nucleic acid bases which increases the Tm.

	Modification 5'	**Modification 3'**
OL-BLPROBE	FAM / HEX	BHQ-1 / CBX
	ROX / TxR / Cy5	BHQ-2 / CBQX2 / CBQX3

5.3 Hydrolysis Probes with MGB

These probes end with a polyamine that increases their Tm by binding to the DNA template. This enhances their specificity and allows them to be used in assays to discriminate between different strains of microorganisms.

	Modification 5'	**Modification 3'**
OL-MGBPROBE	FAM / HEX / ROX/ TxR / Cy5	Eclipse / BHQ1

Also available:
Molecular Beacon Probes
Scorpion Probes

6. Fluorophores & Quenchers for probes manufacturing

Most used fluorophores (FAM, HEX, ROX & CY5) and quenchers (BHQ1, BHQ2 & Eclipse) for probes manufacturing.

Reference	Emission wavelegth	Description
OL-FFAM	517 nm	5(6)-FAM phosphoramidite (x1 g)
OL-FHEX	539 nm	5(6)-HEX phosphoramidite (x1 g)
OL-FROX	604 nm	5(6)-ROX phosphoramidite (x1 g)
OL-FCy5	670 nm	Cy5 phosphoramidite (x1 g)

Reference	Absorbance wavelength	Description
OL-QBH1	500 – 560 nm	Non-fluorescent Black Hole Quencher-1 phosphoramidite (x100 mg)
OL-QBH2	520 – 580 nm	Non-fluorescent Black Hole Quencher-2 phosphoramidite (x100 mg)
OL-QECL	470 – 530 nm	Non-fluorescent Eclipse quencher analogue. Phosphoramidite derivative (x100 mg)

A global solution for your Molecular Diagnostic needs

Personalised and customised product

Storage:
Products are stable at room temperature in the short term. It is recommended frozen conditions (-20ºC) for storage.

Deliveries.
Transport at ambient temperatures

“Our expertise is to develop accurate and reliable products to improve your molecular diagnostic assays.

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