



Genomics

qPCR Probes

Dual Labelled Probes. Molecular Beacons. More.

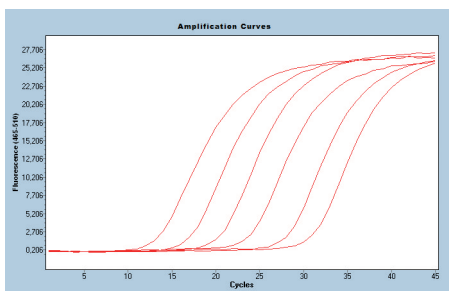


Excellence In Real-Time PCR.

Advantages of using Eurofins Genomics

Eurofins Genomics has more than 20 years of experience in synthesizing modified oligonucleotides and probes.

As a service lab for food, species and forensic testing we have a significant expertise in probe based real-time PCR and know the functional and quality requirements for qPCR Probes.



TaqMan® assay with a FAM-TAM Probe on a LightCycler® instrument.

Our quality commitment

- Each qPCR Probe is HPLC purified and subsequently checked by MALDI-TOF MS to ensure highest quality.
- The performance of our qPCR Probes is continuously confirmed by our Applied Genomics department.
- Our quality assurance is ISO 9001 & ISO 13485 certified to underline our commitment to deliver best quality products.

Documents & data sheets

Synthesis report, data sheet, delivery note and the quality report with the MALDI-TOF MS traces are provided for all qPCR Probes in your online account free of charge.

Dual Labelled Probes.

Hydrolysis probes for TaqMan® assays

Dual Labelled Probes are designed to increase the efficiency and specificity of quantitative PCR and allow simultaneous detection of multiple targets in a single reaction. They are widely used in academic, food, environmental and medical research for:

- Gene expression analysis
- SNP & HLA genotyping
- Mutation detection & DNA quantification
- Verification of NGS and microarray results

Design your Dual Labelled Probes

5' FLUOROPHORE	Abs [nm]	Em [nm]	3' QUENCHER
FAM [FAM]	495	520	TAM, BHQ1, DAB, Eclip
TET [TET]	521	536	TAM, BHQ1
JOE [JOE]	520	548	TAM, BHQ1, BHQ2
Yakima Yellow [YAKYE]	530	549	BHQ1, Eclip
HEX [HEX]	535	556	TAM, BHQ1, BHQ2, Eclip
Cyanine3 [CY3]	552	570	BHQ1, BHQ2, BBQ650
ATTO 550 [ATTO550]	554	576	TAM, BHQ2
TAMRA [TAM]	544	576	BHQ2
ROX [ROX]	575	602	TAM, BHQ2, BBQ650
Texas Red [TxRed]	583	603	BHQ2, BBQ650
Cyanine3.5 [CY35]	588	604	BHQ2
LightCycler 610 [LC610]	590	610	BHQ2
LightCycler 640 [LC640]	625	640	BHQ2, BBQ650
ATTO 647N [ATTO647N]	644	669	BHQ2, BBQ650
Cyanine5 [CY5]	649	670	BHQ2, BBQ650
Cyanine5.5 [CY55]	675	694	BHQ2, BBQ650
ATTO 680 [ATTO680]	680	700	BBQ650

Table of available dye-quencher combinations.

Molecular Beacons.

Oligonucleotide hybridisation probes

Molecular Beacons are used for detecting specific sequences of nucleic acids. They are used in the following real-time assays:

- SNP & nucleic acid detection
- Real-time PCR quantification
- Diagnostic clinical assays
- Allelic discrimination and identification

Build your Molecular Beacons

5' FLUOROPHORE	Abs [nm]	Em [nm]	3' QUENCHER
FAM [FAM]	495	520	TAM, BHQ1, DAB, Eclip
TET [TET]	521	536	TAM, BHQ1
JOE [JOE]	520	548	TAM, BHQ1, BHQ2
HEX [HEX]	535	556	TAM, BHQ1, BHQ2, Eclip
Cyanine3 [CY3]	552	570	BHQ1, BHQ2, BBO650
ATTO 550 [ATTO550]	554	576	TAM, BHQ2
TAMRA [TAM]	544	576	BHQ2
ROX [ROX]	575	602	TAM, BHQ2, BBO650
Texas Red [TxRed]	583	603	BHQ2, BBO650
Cyanine5 [CY5]	649	670	BHQ2, BBO650

Table of available dye-quencher combinations.

Guaranteed yields for Dual Labelled Probes

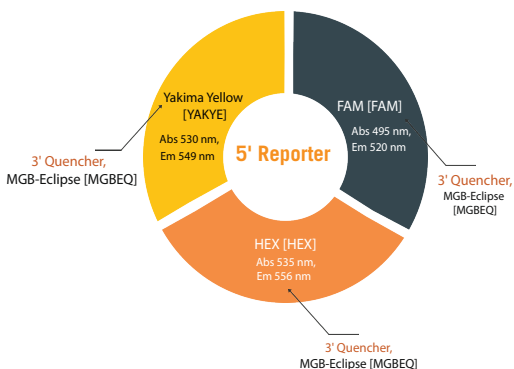
Synthesis scale [μmol]	0,01	0,05	0,2	1,0
Minimum yield [OD]	1	1,5	3	6

NOTE: Molecular Beacons are ordered on the custom DNA oligo order page, as a modified oligo, instead of the qPCR Probe page.

MGB Probes

Eurofins Genomics is licensed to manufacture & sell MGB-Eclipse[®] probes from Elitech group. The gold standard qPCR is a well-known technology for in-vitro diagnostic applications to manage disease & health of patients.

Eurofins Genomics MGB-Eclipse[®] Probes incorporates a 5' fluorescent dye and the 3' Eclipse[®] quencher (EQ) attached to the minor groove binder (MGB) molecule. MGB probe allows efficient & stable hybridization which increases the melting temperature (T_m) for better allelic identification, also suited for AT-rich regions.



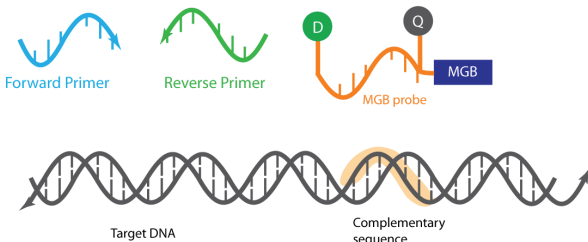
Specifications

Delivered quantity: 5, 20 and 40 nmol
Probe length: 5 - 40 bases
Turn-Around-Time: 6-8 business days
Delivery format: Lyophilized in tubes

Applications:

Real-time PCR/qPCR
SNP Genotyping

MGB Eclipse[®] probe, Primers, and target DNA



LocNA Probes with locked nucleic acids

LocNA Probes facilitates the optimal design of highly-specific, shorter probes.

Product specifications:

Average synthesis yields of 15 nmol resp. 2 OD

Sequence length from 5 - 40 bases

Up to 15 LocNA bases per probe are possible

Only DNA bases are allowed at the 5' and 3' end

HPLC purified by default

Delivered lyophilized or concentration adjusted in tubes

MALDI-TOF MS spectra free of charge

Build your Molecular Beacons

5' FLUOROPHORE	Abs [nm]	Em [nm]	3' QUENCHER
FAM [FAM]	495	520	TAM, BHQ1, TQ2
TET [TET]	521	536	TAM, BHQ1
JOE [JOE]	520	548	TAM, BHQ1, TQ2
HEX [HEX]	535	556	BHQ1, BHQ2, TQ2, TQ3
Cyanine3 [CY3]	552	570	BHQ1, BHQ2
ROX [ROX]	575	602	BHQ2, TQ3
Texas Red [TxRed]	583	603	BHQ2, TQ3
ATTO 647N [ATTO647N]	644	669	BHQ2
Cyanine5 [CY5]	649	670	BHQ2, TQ3

Feel Free To Contact Us.



Email:

GenomicsSupport@eurofins.com



Phone:

1-800-688-2248

8 a.m. – 7 p.m. ET

eurofinsgenomics.com