

## PrimeTime qPCR Probes

Primetype qPCR probes are non-extendable oligonucleotides, labeled with a 5' fluorescent reporter and a 3' quencher dye, licensed for use in 5' qPCR assays.

Minimum Guaranteed Yield in nmol			
Reporter/Quencher	100 nmol scale	250 nmol scale	1 µmol scale
5' 6-FAM / ZEN / 3' Iowa Black FQ	15	25	50
5' 6 FAM / 3' BHQ 1	10	25	50
5' 6-FAM / 3' TAMRA	10	25	50
5' HEX / ZEN / 3' Iowa Black FQ	10	25	50
5' HEX / 3' BHQ 1	10	25	50
5' YAK / ZEN / 3' Iowa Black FQ	NA	25	50
5' TET / ZEN / 3' Iowa Black FQ	10	25	50
5' TET / 3' BHQ 1	10	25	50
5' JOE / ZEN / 3' Iowa Black FQ	NA	8	20
5' MAX / ZEN / 3' Iowa Black FQ	2	8	20
5' TYE 563 / 3' Iowa Black RQ	2	8	20
5' TYE 665 / 3' Iowa Black RQ	2	8	20
5' TEX 615 / 3' Iowa Black RQ	2	8	20
5' Cy 5 / TAO / 3' Iowa Black RQ	2	8	20
5' Cy 5 / 3' BHQ 2	2	8	20
5' Cy 3 / 3' Iowa Black RQ	2	8	20
5' Cy 3 / 3' BHQ 2	2	8	20

The ZEN /TAO internal quencher decreases the length between the fluorophore and quencher resulting in:

- Less background
- Reduced C<sub>q</sub> values
- Improved Precision

For more information on ZEN / TAO internal quenchers, visit [www.idtdna.com](http://www.idtdna.com). For other fluorophore / quencher combinations, please enquire.

## PrimeTime qPCR Mini Probes and Eco Probes

The Primetime Mini qPCR probes are ideal for testing new probes and screening to measure the expression levels of many genes. The Primetime Eco qPCR probe is the ideal scale for researchers who need to perform ~500 reactions for gene expression analysis. The combination of medium scale and low cost is ideal for initial screening of large sample sets. Both Mini and Eco Probes are available as double-quenched probes, with 5'FAM and a 3' IBFQ quencher in combination with an internal ZEN quencher and are shipped within 3 - 5 business days.

Product	5' Reporter Dye(s)	Quencher(s)	Delivery Amount
Mini	FAM	ZEN / Iowa Black FQ	0.5 nmol
Eco			2.5 nmol

## MGB Eclipse Probes and Primers\*

PCR is an important tool for in vitro diagnosis and patient management. The gold standard for qPCR is 5' nuclease assays, using probes that incorporate a minor groove binder.



### MGB Eclipse Probes.

The incorporation of a minor groove binder (MGB) stabilizes probe-target hybridization and increases melting temperature, allowing the use of shorter probes which are better suited for allelic discrimination and targeting AT-rich regions in qPCR assays.

We have combined our oligo manufacturing expertise and ISO 13485 certified production process to deliver MGB Eclipse Probes and companion GMP primers for use as components in clinical diagnostic tests.

\* For use as a component in the Purchaser's Human IVD applications only.

## Custom DNA Synthesis

Synthesis Scale	Length (bases)
25 nmol	15 - 60
100 nmol	10 - 90
250nmol	5 - 100
1 $\mu$ mol	5 - 100
5 $\mu$ mol	5 - 100
10 $\mu$ mol	5 - 100

## Custom DNA Synthesis in Plates

Synthesis Scale	Length (bases)
500 picomole DNA Plate Oligo*	15 - 60
25 nmol DNA Plate Oligo	15 - 60
100 nmol DNA Plate Oligo	10 - 90
250 nmol DNA Plate Oligo	5 - 100
1 $\mu$ mol DNA Plate Oligo	5 - 100

Minimum order of 24 oligos required per plate for 25 nmol to 1  $\mu$ mol scale.  
 Free normalization service for plates.

\*A minimum order of 288 oligonucleotides is required for the 500 pmol scale

## Ultramer Oligonucleotide Synthesis (45–200 bases)

Product	Purification	Guaranteed Yield
4 nmol Ultramer DNA Oligo	Standard Desalt	4 nmol
20 nmol Ultramer DNA Oligo	Standard Desalt	20 nmol
PAGE Purification for Ultramer Oligos	PAGE Purification	Inquire
200 picomole Ultramer DNA Plate Oligo	Standard Desalt	200 pmol / well
4 nmol Ultramer DNA Plate Oligo	Standard Desalt	4 nmol / well
20 nmol Ultramer DNA Plate Oligo	Standard Desalt	20 nmol / well

See [www.idtdna.com](http://www.idtdna.com) for modifications for Ultramer Oligonucleotides and more details.

IDT offers many analytical and preparative services for oligos including;

- Mass spectrometry QC offered for all oligos
- LabReadyOligo Service - shipped in IDTE at 100  $\mu$ M
- Standard mixed-base sites
- Custom analytical services

## Custom RNA Synthesis

Synthesis Scale	Length (bases)
100 nmol	5 - 60
250 nmol	5 - 60
1 $\mu$ mol	5 - 60
5 $\mu$ mol	5 - 60
10 $\mu$ mol	5 - 60

## Ultramer RNA Oligonucleotides Synthesis (60-120 bases)

Product	Purification	Guaranteed Yield
Ultramer RNA Oligo, 4 nmol	Standard Desalt	4 nmol
Ultramer RNA Oligo, 20 nmol	Standard Desalt	20 nmol
Ultramer RNA Oligo, 80 nmol	Standard Desalt	80 nmol

## Purification

Purification	25 nmol	100 nmol	250 nmol	1 $\mu$ mol	5 $\mu$ mol	10 $\mu$ mol
PAGE	N/A	✓	✓	✓	✓	✓
HPLC	N/A	✓	✓	✓	✓	✓
IE-HPLC	N/A	✓	✓	✓	✓	✓
RNase-Free HPLC	N/A	✓	✓	✓	✓	✓
Dual HPLC	N/A	✓	✓	✓	✓	✓
Dual PAGE & HPLC	N/A	N/A	✓	✓	✓	✓