

October, 2007

## Subject: Guaranteed Yield Changed for DNA/RNA Synthesis Service

Dear customers,

Thank you for your usual order for our products and services.

Please be informed that the measurement unit for guaranteed yield is changed from “ $\mu$  g” to “OD” for our DNA/RNA synthesis service. Also, please notify that the guaranteed yield is changed for 51mers or more length products in HPLC and PAGE purification products and modified DNA. For more detail, please see the below.

We apologize for your inconvenience that may be caused.

Thank you for your understanding.

Sincerely yours,

### New Guaranteed Yield for DNA/RNA Synthesis Service

Applied from October 9<sup>th</sup>, 2007

<Non-modified DNA>

Order Description		Available Length					
Purification	Scale	~10mer	11~50mer	51~70mer	71~99mer	100~120mer	121~150mer
Gel filtration Reverse-phase cartridge column purification	OLIGOKIDS (15 nmol)*7	-	1 OD	-	-	-	-
Gel filtration *1	25nmol	-	2 OD	-	-	-	-
	0.05 $\mu$ mol	-	5 OD	-	-	-	-
	0.2 $\mu$ mol	-	8 OD	-	-	-	-
	1 $\mu$ mol	-	30 OD	-	-	-	-
Reverse-phase cartridge column purification *2 (with or without TOF/MS data attached)*3	25nmol	-	1 OD	-	-	-	-
	0.05 $\mu$ mol	-	3 OD	-	-	-	-
	0.2 $\mu$ mol	1 OD	5 OD	5 OD	-	-	-
	1 $\mu$ mol	5 OD	20 OD	20 OD	-	-	-
HPLC Purification	25nmol	-	1 OD	-	-	-	-
	0.05 $\mu$ mol	-	2 OD	-	-	-	-
	0.2 $\mu$ mol	1 OD	3 OD	2 OD	1 OD	-	-
	1 $\mu$ mol	4 OD	12 OD	6 OD	2 OD	1 OD	-
IEX HPLC Purification*4	0.2 $\mu$ mol	-	1 OD	-	-	-	-
High Purity*5	1 $\mu$ mol	-	1 OD	-	-	-	-
PAGE Purification*6	0.2 $\mu$ mol	-	1 OD	1 OD	1 OD	-	-
	1 $\mu$ mol	-	4 OD	4 OD	2 OD	1 OD	1 OD

- \*1 Gel filtration is available for the oligos between 11 and 50mers.
- \*2 Reverse-phase cartridge purification is available for the oligos between 11 and 70mers. HPLC purification or PAGE purification are recommended for the oligos longer than 71mers. HSS will not be responsible for the orders other than this specification.
- \*3 TOF/MS data attachment is available only for the oligos up to 35mers.
- \*4 IEX HPLC purification is available only for the oligos between 11 and 30mers in 0.2  $\mu$  mol scale.
- \*5 High purification is available only for the oligos between 20 and 50mers in 1  $\mu$  mol scale.
- \*6 PAGE purification is available only for the oligos in 0.2 or 1  $\mu$  mol scale.
- \*7 More than two oligos order is required for OLIGO KIDS (15nmol) scale products. Only one oligo order is dealt as 25nmol scale product.

#### <Modified DNA and RNA>

Order Description		Available Length					
Modified DNA	Scale	~10mer	11~50mer	51~70mer	71~99mer	100~120mer	121~150mer
Gel filtration *1	0.2 $\mu$ mol	–	1 OD	–	–	–	–
	1 $\mu$ mol	–	8 OD	–	–	–	–
Reverse-phase cartridge column purification *2	0.2 $\mu$ mol	–	1 OD	1 OD	–	–	–
	1 $\mu$ mol	–	8 OD	4 OD	–	–	–
HPLC Purification	0.2 $\mu$ mol	–	1 OD	1 OD	1 OD	–	–
	1 $\mu$ mol	–	8 OD	4 OD	2 OD	Pl. inquire.	–
RNA Product	Scale	~10mer	11~50mer	51~70mer	71~99mer	100~120mer	121~150mer
Desalted*3	0.2 $\mu$ mol	–	8 OD	–	–	–	–
	1 $\mu$ mol	–	1 mg	–	–	–	–
HPLC Purification*3	0.2 $\mu$ mol	–	1 OD	–	–	–	–
	1 $\mu$ mol	–	8 OD	–	–	–	–

- \* Orders for modified oligos are accepted in 0.2  $\mu$  mol or more scale.
- \* For gel filtration and reverse-phase cartridge purification, modification is limited to middle of sequence or 3'-end except for phosphorothioate.
- \* Modification for 5'-end is available only for HPLC purification except amination and phosphorylation which are available from Reverse-phase cartridge purification.
- \* Modification for 3'-end is available only for the oligos between 11 and 50mers.
- \* Phosphorothioated oligo is available from 1mg. Guaranteed yield for Texas Red DNA is total 50pmol.

- \*1 Gel filtration is available for the oligos between 11 and 50mers.
- \*2 Reverse-phase cartridge purification is available for the oligos between 11 and 70mers.
- \*3 RNA product is available for the oligos between 11 and 30mers. Please inquire for the other length.