# Instrument controller software run summary:

**Filename and data path:** C:\Agilent Technologies\Data\2021 07 20\11-14-24\2021 07 20 11H 14M.raw
**Created:** Tuesday, July 20, 2021 11:40:06 AM
**Number of capillaries:** 9
**Array serial number:** 022621-27SFS
**Effect length:** 33 cm
**Array usage count:** 12
**Instrument type:** 5300 Fragment Analyzer
**Instrument controller software version:** 3.1.0.12
**Device serial number:** MY2105AB19

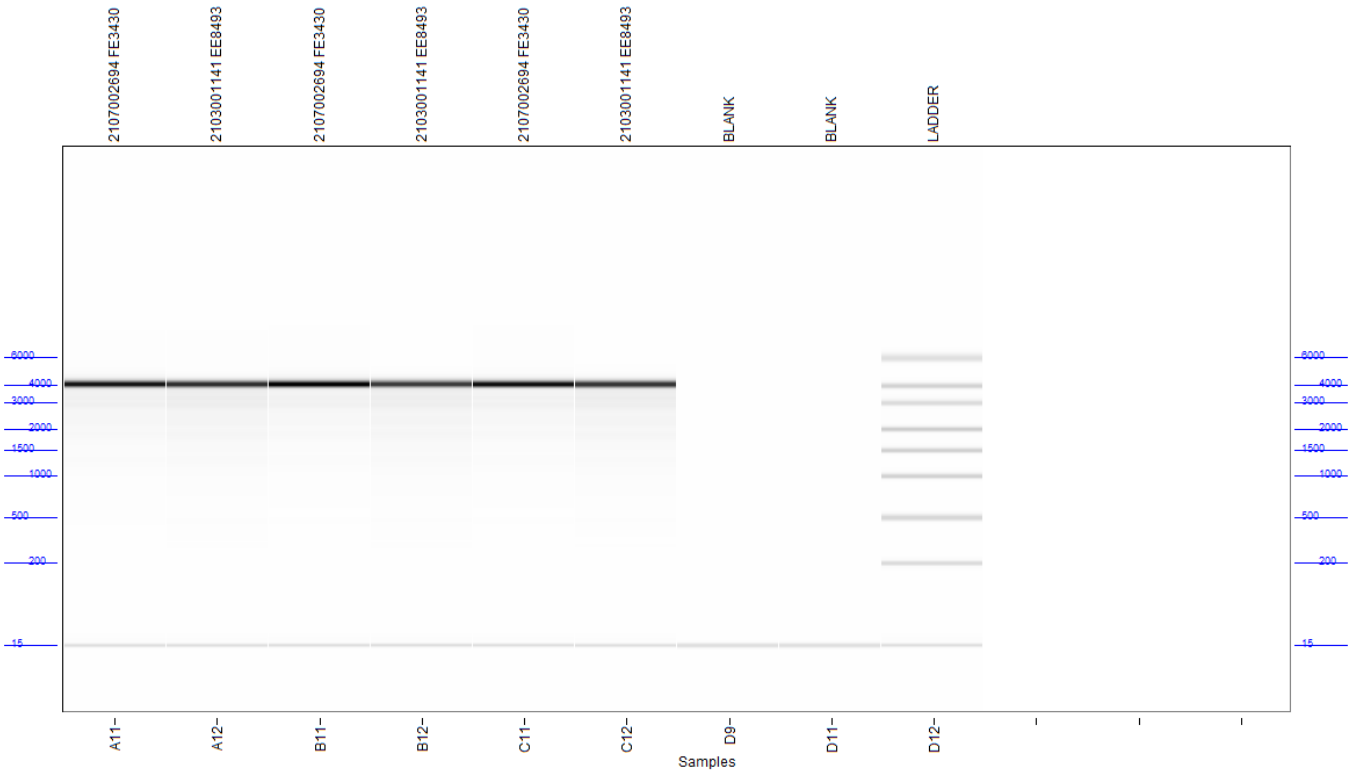
## Method Information

**Method name:** DNF-471E33 - SS Total RNA 15nt Extended.mthds
**Gel prime:** No
**Full conditioning:** Yes
**Gel prime to buffer:** Yes
**Gel selection:** Gel 2
**Perform prerun:** 8.0 kV, 30 sec.
**Rinse:** No
**Marker 1:** No
**Rinse:** Tray: 3, Row: A, Dip count: 2
**Sample injection:** 5.0 kV, 6 sec.
**Separation:** 8.0 kV, 60.0 min.
**Tray name:** Tray-1

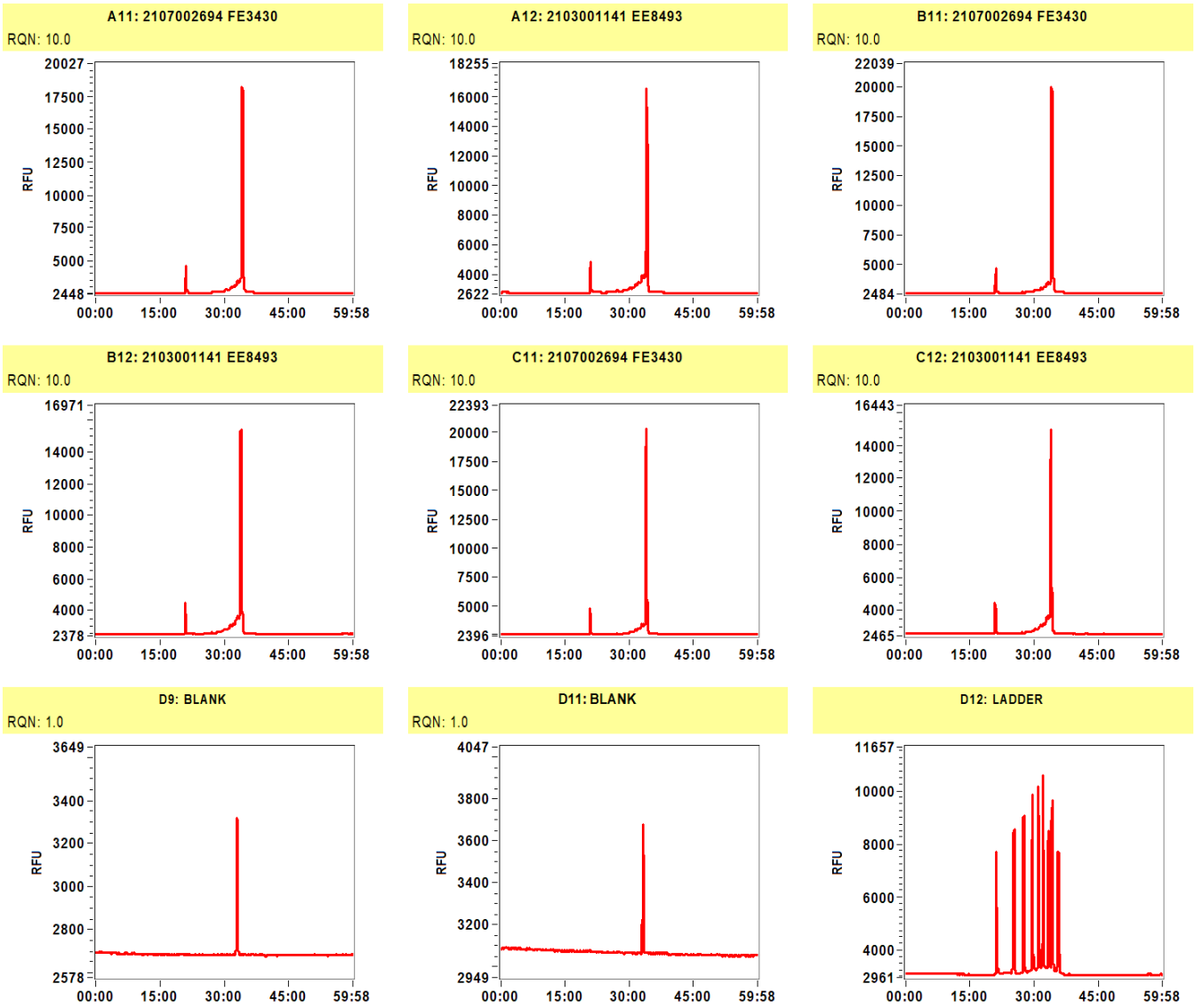
**Analysis mode:** RNA (Eukaryotic)

**Notes**

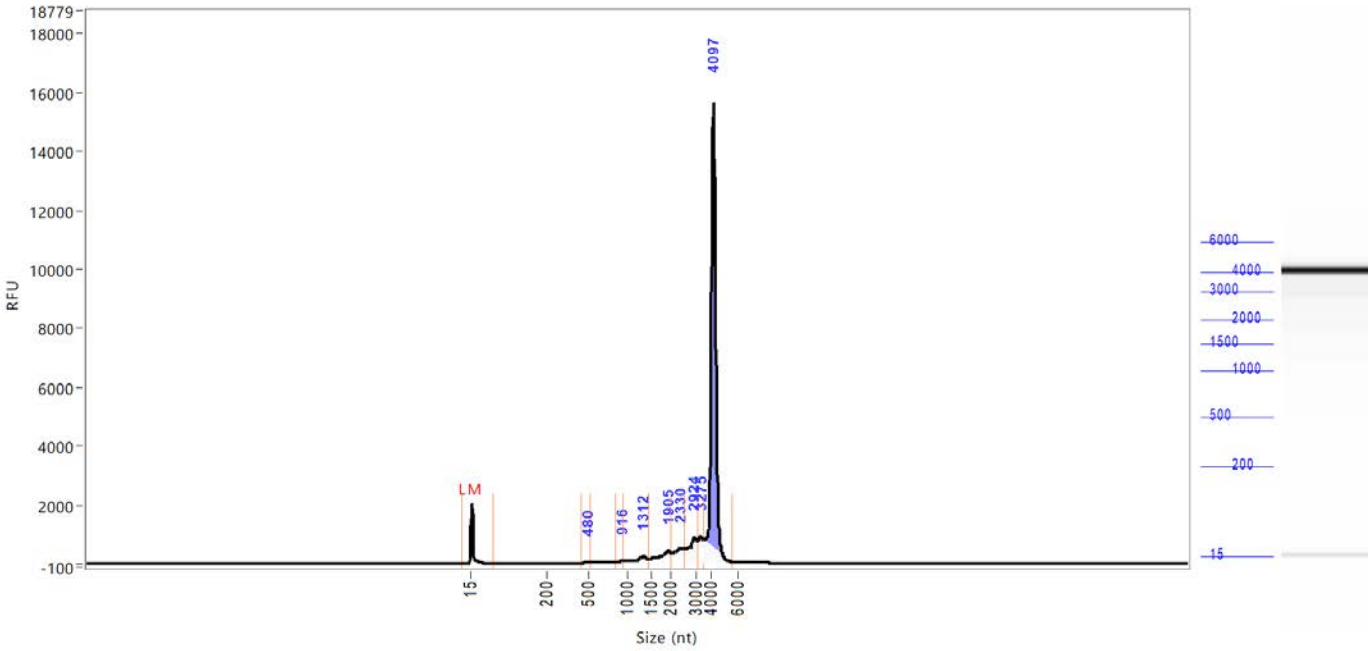
# Gel Image


2107002694 FE3430
2103001141 EE8493
2107002694 FE3430
2103001141 EE8493
2107002694 FE3430
2103001141 EE8493
BLANK
BLANK
LADDER
6000
4000
3000
2000
1500
1000
500
200
15
A11
A12
B11
B12
C11
C12
D9
D11
D12
Samples

**Filename and data path:** C:\Agilent Technologies\Data\2021 07 20\11-14-24\2021 07 20 11H 14M.raw



**Sample:** 2107002694 FE3430
**Well location:** A11
**Created:** Tuesday, July 20, 2021 11:40:06 AM



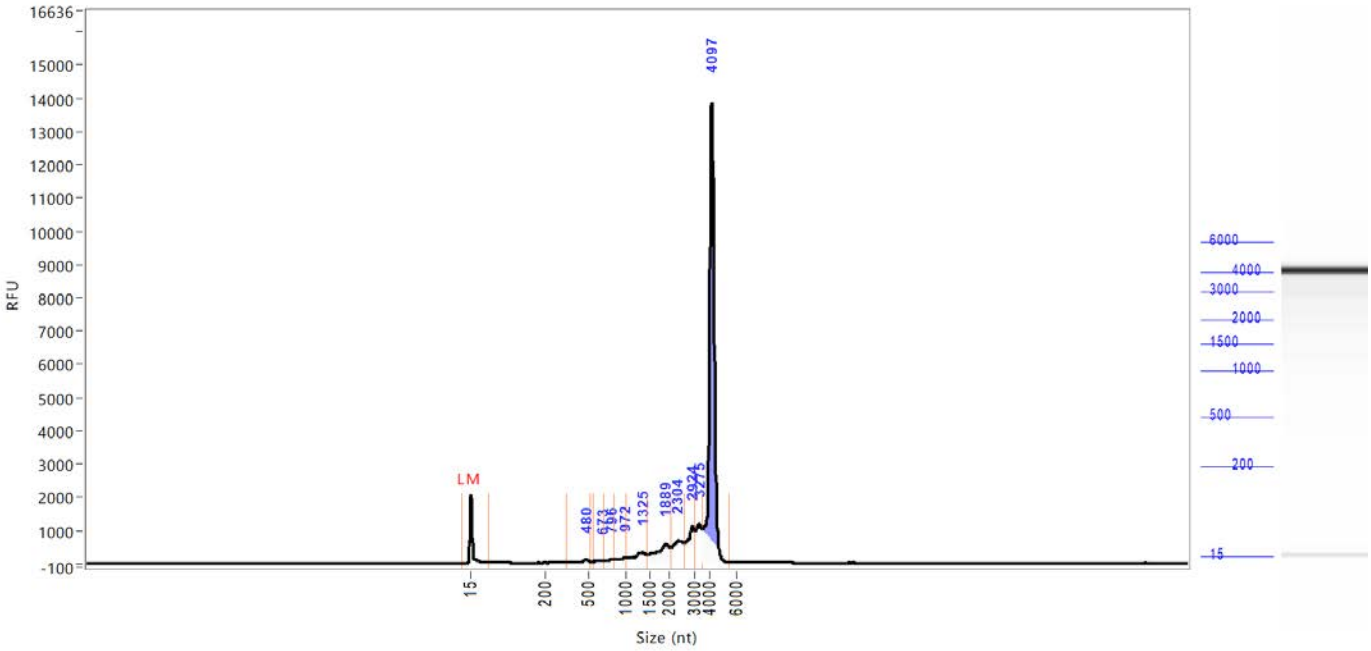

| Peak | Size | Concentration | From | To | RFU |
|---|---|---|---|---|---|
| | (nt) | (ng/uL) | (nt) | (nt) | |
| 1 | 15 (LM) | 0.7285 | 0 | 68 | 2045 |
| 2 | 480 | 0.4450 | 443 | 513 | 59 |
| 3 | 916 | 0.7449 | 832 | 944 | 87 |
| 4 | 1312 | 3.9296 | 944 | 1422 | 248 |
| 5 | 1905 | 6.9290 | 1422 | 2001 | 444 |
| 6 | 2330 | 6.5323 | 2001 | 2557 | 522 |
| 7 | 2924 | 8.4954 | 2557 | 3079 | 906 |
| 8 | 3275 | 5.6550 | 3079 | 3491 | 924 |
| 9 | 4097 | 81.2872 | 3491 | 5639 | 15646 |

| | | |
|---|---|---|
| TIC: | 114.0184 | ng/uL |
| TIM: | 113.2591 | nmole/L |
| Total concentration: | 117.4163 | ng/uL |
| 28s/18s: | 101.2 | |
| RQN | 10.0 | |

| Smear Analysis | | | | | | |
|---|---|---|---|---|---|---|
| | 3700 nt to 4800 nt | 77.2532 ng/ul | 65.8 %Total | 58.6045 nmole/L | 4112 Avg. Size (nt) | 4.27 %CV |
| | 4800 nt to 13000 nt | 3.2948 ng/ul | 2.8 %Total | 1.5735 nmole/L | 6533 Avg. Size (nt) | 24.80 %CV |

```
Sample peak width (sec): 6    Sample min peak height: 50    Sample baseline V to V?: N    Sample baseline V to V points: 3
Sample filter: Binomial       Number of points for filter: 9  Sample start region (min): 0  Sample end region (min): 60
Manual baseline start (min): 18     Manual baseline end (min): 59
Marker peak width (sec): 6    Marker min peak height: 100   Marker baseline V to V?: Y    Marker baseline V to V points: 3
Lower marker selection: First peak > 100 RFU                Upper marker selection: Last peak > 100 RFU
Ladder size (nt)15, 200, 500, 1000, 1500, 2000, 3000, 4000, 6000
Quantification using: Ladder          Final concentration (ng/uL): 8.0000          Dilution factor: 12.0
Minimum RFU for data processing: 2
```

**Sample:** 2103001141 EE8493
**Well location:** A12
**Created:** Tuesday, July 20, 2021 11:40:06 AM



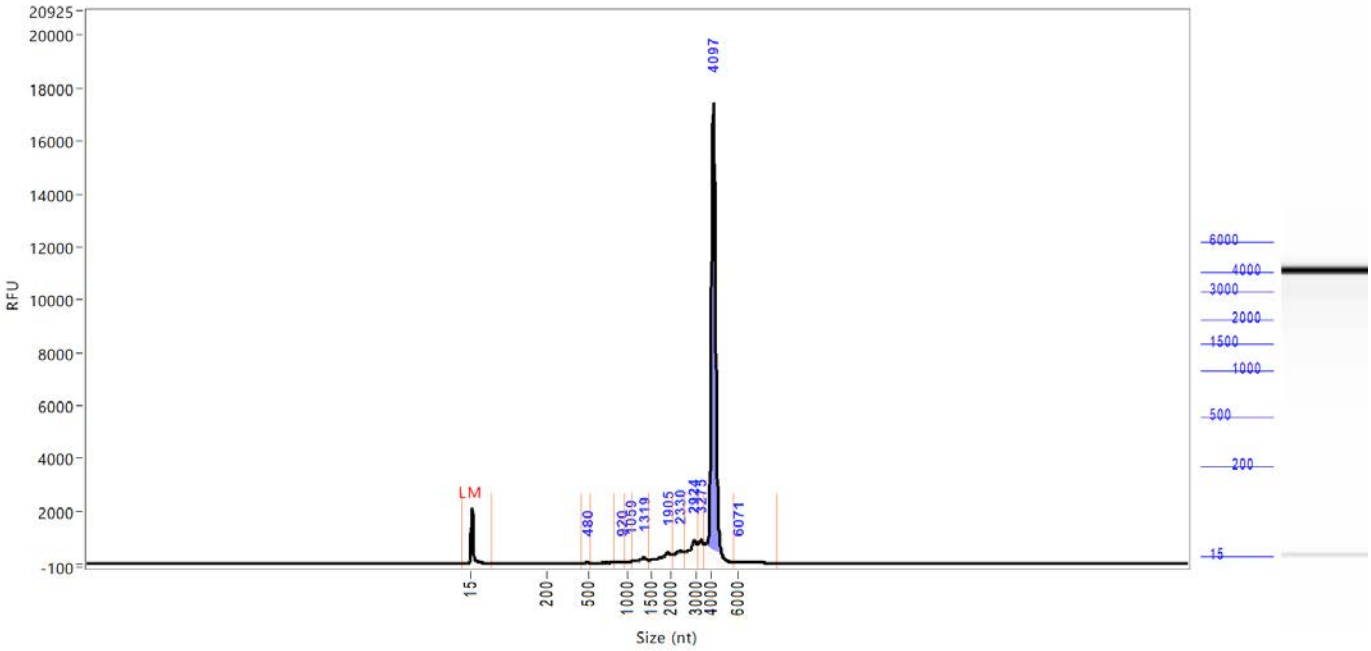

| Peak | Size | Concentration | From | To | RFU |
|---|---|---|---|---|---|
| | (nt) | (ng/uL) | (nt) | (nt) | |
| 1 | 15 (LM) | 0.7285 | 0 | 58 | 2050 |
| 2 | 480 | 1.6500 | 341 | 533 | 126 |
| 3 | 673 | 0.7915 | 573 | 697 | 78 |
| 4 | 796 | 1.1851 | 697 | 832 | 116 |
| 5 | 972 | 1.9677 | 832 | 996 | 158 |
| 6 | 1325 | 5.5605 | 996 | 1435 | 328 |
| 7 | 1889 | 10.2096 | 1435 | 2026 | 588 |
| 8 | 2304 | 8.5353 | 2026 | 2570 | 687 |
| 9 | 2924 | 9.7719 | 2570 | 3040 | 1120 |
| 10 | 3275 | 7.5513 | 3040 | 3471 | 1186 |
| 11 | 4097 | 75.4642 | 3471 | 5518 | 13860 |

| | | |
|---|---|---|
| TIC: | 122.6870 | ng/uL |
| TIM: | 146.1882 | nmole/L |
| Total concentration: | 125.2247 | ng/uL |
| 28s/18s: | 71.5 | |
| RQN | 10.0 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Smear Analysis | 3700 nt to 4800 nt | 71.0246 ng/ul | 56.7 %Total | 54.0354 nmole/L | 4101 Avg. Size (nt) | 4.21 %CV |
| | 4800 nt to 13000 nt | 2.3203 ng/ul | 1.9 %Total | 1.0197 nmole/L | 7099 Avg. Size (nt) | 25.44 %CV |

```
Sample peak width (sec): 6    Sample min peak height: 50    Sample baseline V to V?: N    Sample baseline V to V points: 3
Sample filter: Binomial       Number of points for filter: 9  Sample start region (min): 0  Sample end region (min): 60
Manual baseline start (min): 18     Manual baseline end (min): 59
Marker peak width (sec): 6    Marker min peak height: 100   Marker baseline V to V?: Y    Marker baseline V to V points: 3
Lower marker selection: First peak > 100 RFU                Upper marker selection: Last peak > 100 RFU
Ladder size (nt)15, 200, 500, 1000, 1500, 2000, 3000, 4000, 6000
Quantification using: Ladder          Final concentration (ng/uL): 8.0000          Dilution factor: 12.0
Minimum RFU for data processing: 2
```

**Sample:** 2107002694 FE3430
**Well location:** B11
**Created:** Tuesday, July 20, 2021 11:40:06 AM



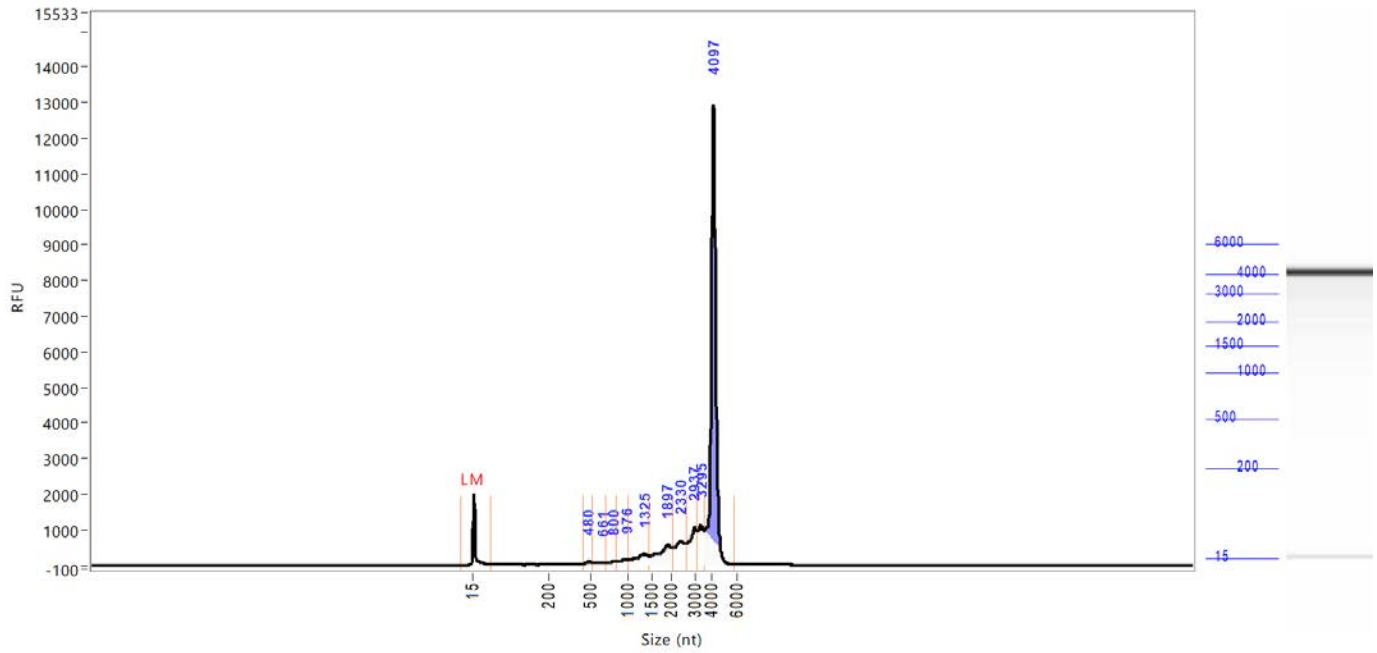

| Peak | Size | Concentration | From | To | RFU |
|---|---|---|---|---|---|
| | (nt) | (ng/uL) | (nt) | (nt) | |
| 1 | 15 (LM) | 0.7285 | 0 | 63 | 2121 |
| 2 | 480 | 0.3706 | 441 | 517 | 55 |
| 3 | 920 | 0.6510 | 828 | 948 | 76 |
| 4 | 1059 | 0.6450 | 948 | 1066 | 98 |
| 5 | 1319 | 2.8676 | 1066 | 1429 | 235 |
| 6 | 1905 | 6.5558 | 1429 | 2026 | 437 |
| 7 | 2330 | 5.7349 | 2026 | 2557 | 498 |
| 8 | 2924 | 8.0547 | 2557 | 3079 | 919 |
| 9 | 3275 | 5.4499 | 3079 | 3510 | 900 |
| 10 | 4097 | 85.2881 | 3510 | 5711 | 17433 |
| 11 | 6071 | 1.9951 | 5711 | 9097 | 78 |

| | | |
|---|---|---|
| TIC: | 117.6128 | ng/uL |
| TIM: | 112.6344 | nmole/L |
| Total concentration: | 118.6681 | ng/uL |
| 28s/18s: | 96.8 | |
| RQN | 10.0 | |

| Smear Analysis | | | | | | |
|---|---|---|---|---|---|---|
| | 3700 nt to 4800 nt | 81.7445 ng/ul | 68.9 %Total | 62.0269 nmole/L | 4111 Avg. Size (nt) | 4.16 %CV |
| | 4800 nt to 13000 nt | 3.6584 ng/ul | 3.1 %Total | 1.7381 nmole/L | 6567 Avg. Size (nt) | 23.19 %CV |

```
Sample peak width (sec): 6    Sample min peak height: 50    Sample baseline V to V?: N    Sample baseline V to V points: 3
Sample filter: Binomial       Number of points for filter: 9  Sample start region (min): 0  Sample end region (min): 60
Manual baseline start (min): 18     Manual baseline end (min): 59
Marker peak width (sec): 6    Marker min peak height: 100   Marker baseline V to V?: Y    Marker baseline V to V points: 3
Lower marker selection: First peak > 100 RFU                Upper marker selection: Last peak > 100 RFU
Ladder size (nt)15, 200, 500, 1000, 1500, 2000, 3000, 4000, 6000
Quantification using: Ladder          Final concentration (ng/uL): 8.0000          Dilution factor: 12.0
Minimum RFU for data processing: 2
```

**Sample:** 2103001141 EE8493
**Well location:** B12
**Created:** Tuesday, July 20, 2021 11:40:06 AM



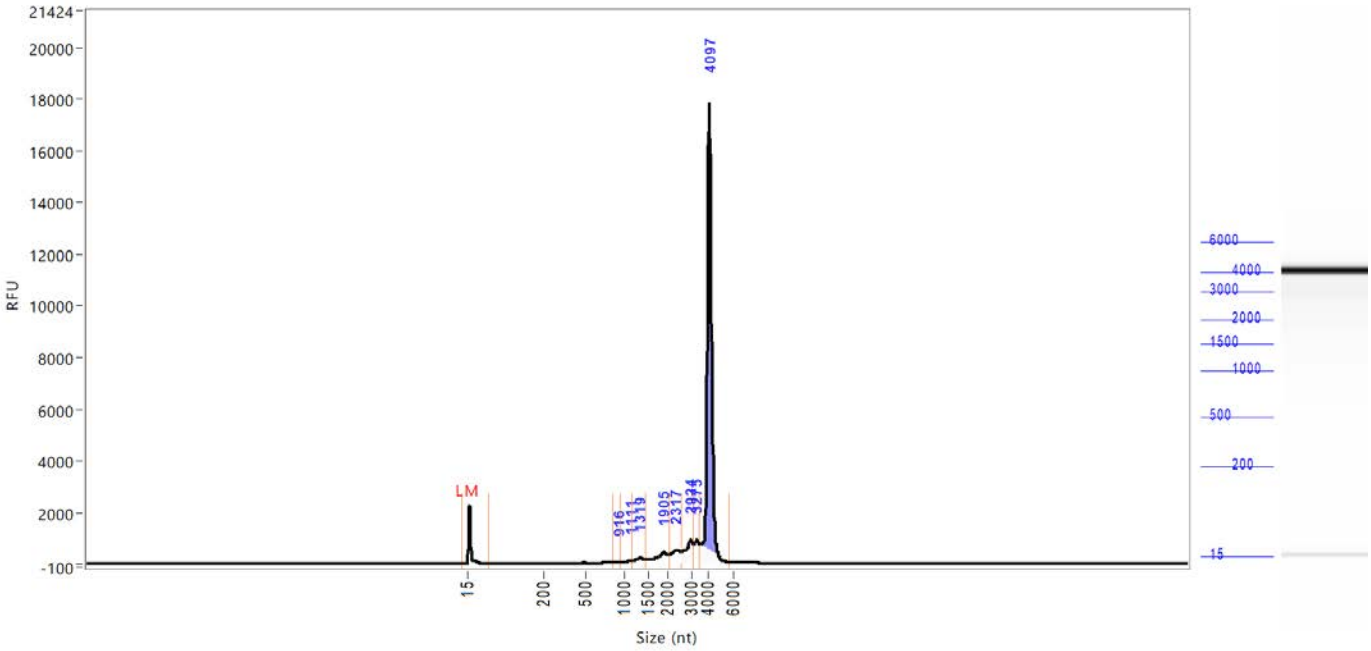

| Peak | Size | Concentration | From | To | RFU |
|---|---|---|---|---|---|
| | (nt) | (ng/uL) | (nt) | (nt) | |
| 1 | 15 (LM) | 0.7285 | 0 | 60 | 2020 |
| 2 | 480 | 0.9098 | 443 | 529 | 119 |
| 3 | 661 | 0.9886 | 529 | 697 | 80 |
| 4 | 800 | 1.2390 | 697 | 844 | 115 |
| 5 | 976 | 1.8346 | 844 | 1000 | 152 |
| 6 | 1325 | 5.2235 | 1000 | 1429 | 316 |
| 7 | 1897 | 9.8992 | 1429 | 2026 | 564 |
| 8 | 2330 | 8.2289 | 2026 | 2570 | 668 |
| 9 | 2937 | 9.5862 | 2570 | 3060 | 1062 |
| 10 | 3295 | 7.2502 | 3060 | 3491 | 1131 |
| 11 | 4097 | 70.2941 | 3491 | 5759 | 12940 |

| | | | |
|---|---|---|---|
| | TIC: | 115.4540 | ng/uL |
| | TIM: | 134.8445 | nmole/L |
| | Total concentration: | 116.9471 | ng/uL |
| | 28s/18s: | 71.0 | |
| | RQN | 10.0 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Smear Analysis | 3700 nt to 4800 nt | 66.2012 ng/ul | 56.6 %Total | 50.2151 nmole/L | 4113 Avg. Size (nt) | 4.36 %CV |
| | 4800 nt to 13000 nt | 1.5325 ng/ul | 1.3 %Total | 0.7593 nmole/L | 6297 Avg. Size (nt) | 22.40 %CV |

```
Sample peak width (sec): 6    Sample min peak height: 50    Sample baseline V to V?: N    Sample baseline V to V points: 3
Sample filter: Binomial       Number of points for filter: 9  Sample start region (min): 0  Sample end region (min): 60
Manual baseline start (min): 18     Manual baseline end (min): 59
Marker peak width (sec): 6    Marker min peak height: 100   Marker baseline V to V?: Y    Marker baseline V to V points: 3
Lower marker selection: First peak > 100 RFU                Upper marker selection: Last peak > 100 RFU
Ladder size (nt)15, 200, 500, 1000, 1500, 2000, 3000, 4000, 6000
Quantification using: Ladder          Final concentration (ng/uL): 8.0000          Dilution factor: 12.0
Minimum RFU for data processing: 2
```

**Sample:** 2107002694 FE3430
**Well location:** C11
**Created:** Tuesday, July 20, 2021 11:40:06 AM



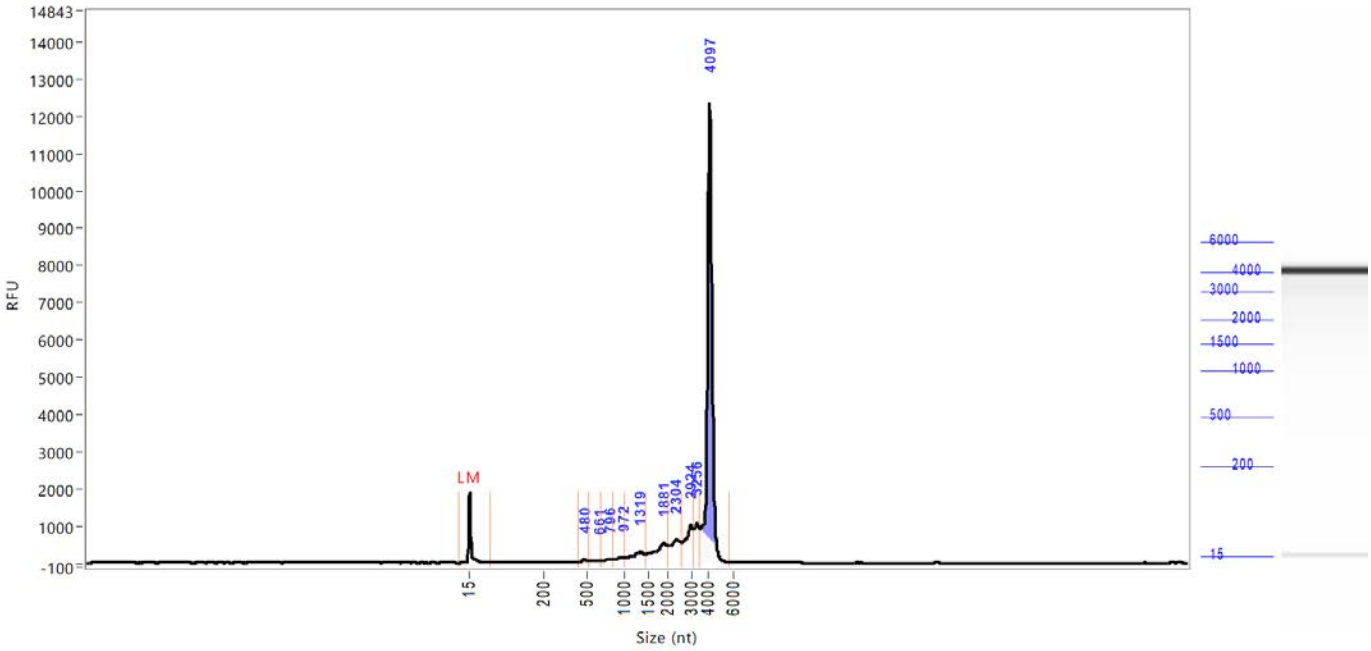

| Peak | Size | Concentration | From | To | RFU |
|---|---|---|---|---|---|
| | (nt) | (ng/uL) | (nt) | (nt) | |
| 1 | 15 (LM) | 0.7285 | 0 | 62 | 2281 |
| 2 | 916 | 0.5985 | 844 | 948 | 83 |
| 3 | 1111 | 1.0788 | 948 | 1157 | 113 |
| 4 | 1319 | 2.3901 | 1157 | 1429 | 254 |
| 5 | 1905 | 6.6073 | 1429 | 2039 | 468 |
| 6 | 2317 | 5.5180 | 2039 | 2557 | 522 |
| 7 | 2924 | 7.6633 | 2557 | 3079 | 957 |
| 8 | 3275 | 5.0721 | 3079 | 3491 | 938 |
| 9 | 4097 | 81.3328 | 3491 | 5711 | 17849 |

| | | |
|---|---|---|
| TIC: | 110.2609 | ng/uL |
| TIM: | 105.0908 | nmole/L |
| Total concentration: | 113.6350 | ng/uL |
| 28s/18s: | 95.7 | |
| RQN | 10.0 | |

| Smear Analysis | | | | | | |
|---|---|---|---|---|---|---|
| | 3700 nt to 4800 nt | 77.7222 ng/ul | 68.4 %Total | 59.0353 nmole/L | 4107 Avg. Size (nt) | 4.15 %CV |
| | 4800 nt to 13000 nt | 3.4396 ng/ul | 3.0 %Total | 1.6362 nmole/L | 6558 Avg. Size (nt) | 23.76 %CV |

```
Sample peak width (sec): 6    Sample min peak height: 50    Sample baseline V to V?: N    Sample baseline V to V points: 3
Sample filter: Binomial       Number of points for filter: 9  Sample start region (min): 0  Sample end region (min): 60
Manual baseline start (min): 18     Manual baseline end (min): 59
Marker peak width (sec): 6    Marker min peak height: 100   Marker baseline V to V?: Y    Marker baseline V to V points: 3
Lower marker selection: First peak > 100 RFU                Upper marker selection: Last peak > 100 RFU
Ladder size (nt)15, 200, 500, 1000, 1500, 2000, 3000, 4000, 6000
Quantification using: Ladder          Final concentration (ng/uL): 8.0000          Dilution factor: 12.0
Minimum RFU for data processing: 2
```

**Sample:** 2103001141 EE8493
**Well location:** C12
**Created:** Tuesday, July 20, 2021 11:40:06 AM



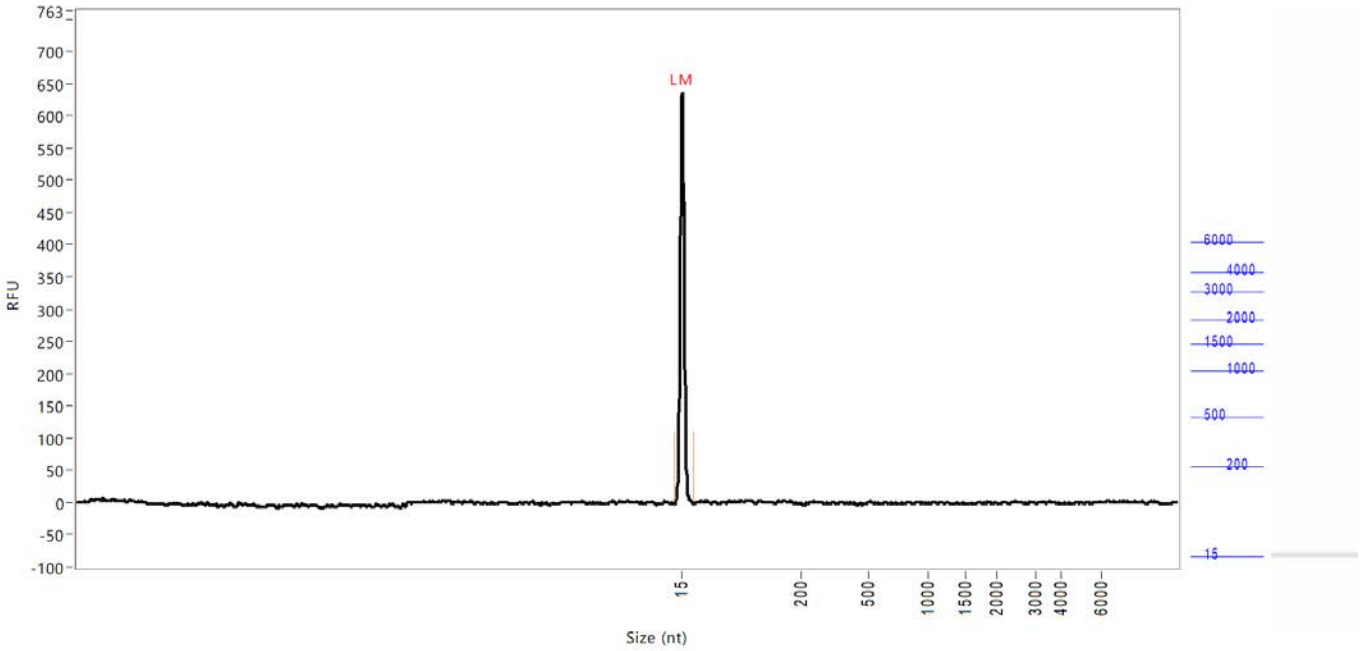

| Peak | Size | Concentration | From | To | RFU |
|---|---|---|---|---|---|
| | (nt) | (ng/uL) | (nt) | (nt) | |
| 1 | 15 (LM) | 0.7285 | 0 | 66 | 1897 |
| 2 | 480 | 0.8834 | 441 | 525 | 113 |
| 3 | 661 | 0.9136 | 525 | 689 | 70 |
| 4 | 796 | 1.1714 | 689 | 828 | 106 |
| 5 | 972 | 1.8919 | 828 | 996 | 140 |
| 6 | 1319 | 5.2565 | 996 | 1422 | 296 |
| 7 | 1881 | 9.5150 | 1422 | 2000 | 531 |
| 8 | 2304 | 8.3134 | 2000 | 2557 | 624 |
| 9 | 2924 | 9.8755 | 2557 | 3040 | 1015 |
| 10 | 3256 | 7.3203 | 3040 | 3471 | 1080 |
| 11 | 4097 | 71.5565 | 3471 | 5663 | 12365 |

| | | |
|---|---|---|
| TIC: | 116.6975 | ng/uL |
| TIM: | 135.9578 | nmole/L |
| Total concentration: | 118.0075 | ng/uL |
| 28s/18s: | 74.4 | |
| RQN | 10.0 | |

| Smear Analysis | | | | | | |
|---|---|---|---|---|---|---|
| | 3700 nt to 4800 nt | 67.1481 ng/ul | 56.9 %Total | 51.1408 nmole/L | 4096 Avg. Size (nt) | 4.26 %CV |
| | 4800 nt to 13000 nt | 1.6044 ng/ul | 1.4 %Total | 0.7894 nmole/L | 6341 Avg. Size (nt) | 21.64 %CV |

```
Sample peak width (sec): 6    Sample min peak height: 50    Sample baseline V to V?: N    Sample baseline V to V points: 3
Sample filter: Binomial       Number of points for filter: 9  Sample start region (min): 0  Sample end region (min): 60
Manual baseline start (min): 18     Manual baseline end (min): 59
Marker peak width (sec): 6    Marker min peak height: 100   Marker baseline V to V?: Y    Marker baseline V to V points: 3
Lower marker selection: First peak > 100 RFU                Upper marker selection: Last peak > 100 RFU
Ladder size (nt)15, 200, 500, 1000, 1500, 2000, 3000, 4000, 6000
Quantification using: Ladder          Final concentration (ng/uL): 8.0000          Dilution factor: 12.0
Minimum RFU for data processing: 2
```

**Sample:** BLANK
**Well location:** D9
**Created:** Tuesday, July 20, 2021 11:40:06 AM



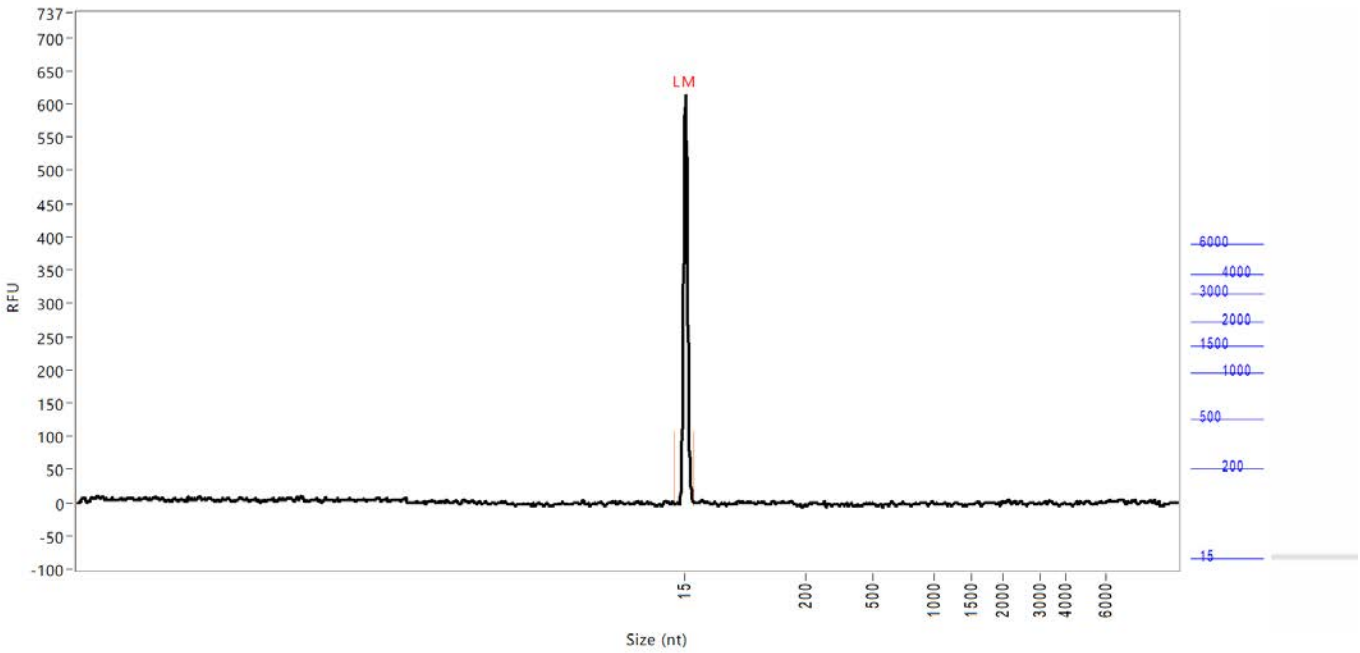

| Peak | Size | Concentration | From | To | RFU |
|---|---|---|---|---|---|
| | (nt) | (ng/uL) | (nt) | (nt) | |
| 1 | 15 (LM) | 0.7285 | 3 | 35 | 632 |

| | | | |
|---|---|---|---|
| TIC: | 0.0000 | ng/uL | |
| TIM: | 0.0000 | nmole/L | |
| Total concentration: | 0.0245 | ng/uL | |
| 28s/18s: | 0.0 | | |
| RQN | 1.0 | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Smear Analysis | 3700 nt to 4800 nt | 0.0000 ng/ul | 0.0 %Total | NaN nmole/L | NaN Avg. Size (nt) | NaN %CV |
| | 4800 nt to 13000 nt | 0.0040 ng/ul | 16.1 %Total | 0.0017 nmole/L | 7361 Avg. Size (nt) | 11.27 %CV |

```
Sample peak width (sec): 6    Sample min peak height: 50    Sample baseline V to V?: N    Sample baseline V to V points: 3
Sample filter: Binomial       Number of points for filter: 9  Sample start region (min): 0  Sample end region (min): 60
Manual baseline start (min): 18     Manual baseline end (min): 59
Marker peak width (sec): 6    Marker min peak height: 100   Marker baseline V to V?: Y    Marker baseline V to V points: 3
Lower marker selection: First peak > 100 RFU                Upper marker selection: Last peak > 100 RFU
Ladder size (nt)15, 200, 500, 1000, 1500, 2000, 3000, 4000, 6000
Quantification using: Ladder          Final concentration (ng/uL): 8.0000          Dilution factor: 12.0
Minimum RFU for data processing: 2
```

**Sample:** BLANK
**Well location:** D11
**Created:** Tuesday, July 20, 2021 11:40:06 AM



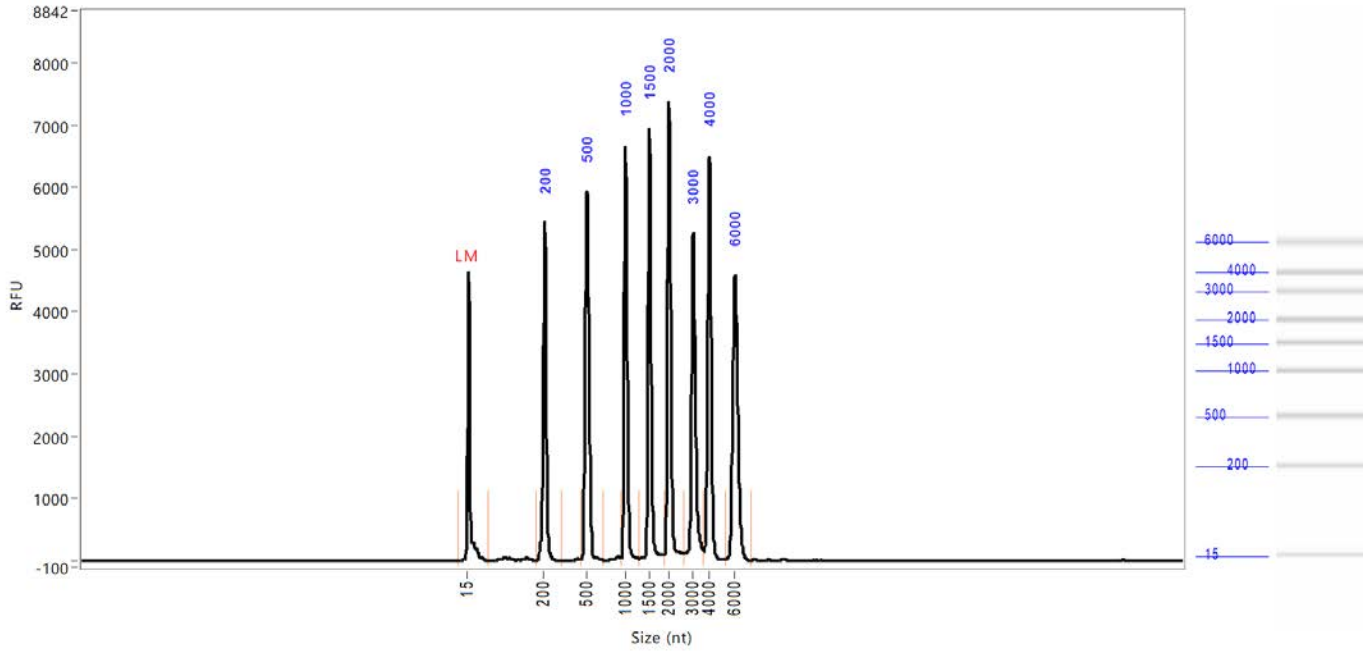

| Peak | Size | Concentration | From | To | RFU |
|---|---|---|---|---|---|
| | (nt) | (ng/uL) | (nt) | (nt) | |
| 1 | 15 (LM) | 0.7285 | 0 | 29 | 611 |

| | | | |
|---|---|---|---|
| TIC: | 0.0000 | ng/uL | |
| TIM: | 0.0000 | nmole/L | |
| Total concentration: | 0.0412 | ng/uL | |
| 28s/18s: | 0.0 | | |
| RQN | 1.0 | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Smear Analysis | 3700 nt to 4800 nt | 0.0000 ng/ul | 0.0 %Total | NaN nmole/L | NaN Avg. Size (nt) | NaN %CV |
| | 4800 nt to 13000 nt | 0.0342 ng/ul | 83.0 %Total | 0.0151 nmole/L | 7043 Avg. Size (nt) | 8.83 %CV |

```
Sample peak width (sec): 6    Sample min peak height: 50    Sample baseline V to V?: N    Sample baseline V to V points: 3
Sample filter: Binomial       Number of points for filter: 9  Sample start region (min): 0  Sample end region (min): 60
Manual baseline start (min): 18     Manual baseline end (min): 59
Marker peak width (sec): 6    Marker min peak height: 100   Marker baseline V to V?: Y    Marker baseline V to V points: 3
Lower marker selection: First peak > 100 RFU                Upper marker selection: Last peak > 100 RFU
Ladder size (nt)15, 200, 500, 1000, 1500, 2000, 3000, 4000, 6000
Quantification using: Ladder          Final concentration (ng/uL): 8.0000          Dilution factor: 12.0
Minimum RFU for data processing: 2
```

**Sample:** LADDER
**Well location:** D12
**Created:** Tuesday, July 20, 2021 11:40:06 AM




| Peak | Size | Concentration | From | To | RFU |
|---|---|---|---|---|---|
| | (nt) | (ng/uL) | (nt) | (nt) | |
| 1 | 15 (LM) | 0.7285 | 0 | 64 | 4635 |
| 2 | 200 | 10.9890 | 180 | 325 | 5439 |
| 3 | 500 | 14.7016 | 454 | 717 | 5929 |
| 4 | 1000 | 12.0321 | 940 | 1273 | 6657 |
| 5 | 1500 | 11.9891 | 1273 | 1873 | 6941 |
| 6 | 2000 | 12.8603 | 1873 | 2633 | 7366 |
| 7 | 3000 | 10.7533 | 2633 | 3667 | 5267 |
| 8 | 4000 | 11.1550 | 3667 | 5253 | 6490 |
| 9 | 6000 | 11.2858 | 5253 | 7239 | 4596 |

| | | |
|---|---|---|
| TIC: | 95.7662 | ng/uL |
| TIM: | 368.6311 | nmole/L |
| Total concentration: | 96.0000 | ng/uL |

```
Sample peak width (sec): 6    Sample min peak height: 200   Sample baseline V to V?: Y    Sample baseline V to V points: 3
Sample filter: Binomial       Number of points for filter: 9  Sample start region (min): 0  Sample end region (min): 60
Marker peak width (sec): 6    Marker min peak height: 100   Marker baseline V to V?: Y    Marker baseline V to V points: 3
Lower marker selection: First peak > 100 RFU                Upper marker selection: Last peak > 100 RFU
Ladder size (nt)15, 200, 500, 1000, 1500, 2000, 3000, 4000, 6000
Quantification using: Ladder          Final concentration (ng/uL): 8.0000         Dilution factor: 12.0
Minimum RFU for data processing: 2
```

**Sample:** LADDER
**Well location:** D12
**Created:** Tuesday, July 20, 2021 11:40:06 AM
**Fit type:** Point to point