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## Sample ID Table & QC Results (Pre dead cell removal)

Sample #	BGI Sample ID	Customer Sample ID	Sample Type	Sample Volume (ul)	Total Cell Count (per ul)	Cell Viability
1	19159-19-01	CT26-5-1	cell	200	4310	0.644
2	19159-19-02	CT26-5-2	cell	200	3830	0.611
3	19159-19-03	CT26-5-3	cell	200	3840	0.597
4	19159-19-04	CT26-5-4	cell	200	2120	0.521
5	19159-19-05	CT26-5-5	cell	200	3320	0.508
6	19159-19-06	CT26-5-6	cell	200	3240	0.488

## Sample ID Table & QC Results (Post dead cell removal)

Sample #	BGI Sample ID	Customer Sample ID	Sample Type	Sample Volume (ul)	Total Cell Count (per ul)	Cell Viability	Number of cells loaded
1	19159-19-01	CT26-5-1	cell	150	478	0.780	12000
2	19159-19-02	CT26-5-2	cell	150	454	0.784	12000
3	19159-19-03	CT26-5-3	cell	150	490	0.707	12000
4	19159-19-04	CT26-5-4	cell	150	174	0.738	7517
5	19159-19-05	CT26-5-5	cell	150	173	0.550	N/A
6	19159-19-06	CT26-5-6	cell	150	233	0.760	10066

## Cell Pictures

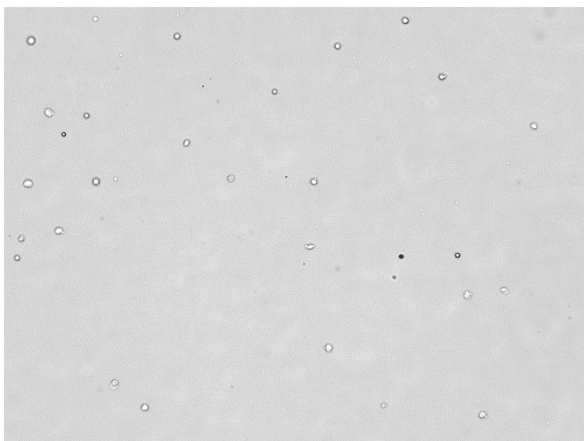


Figure 1 19159-19-IQC-Bright Field Cell Image-1-05062021

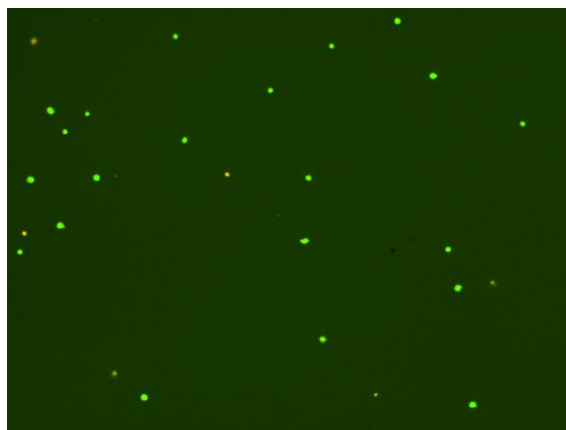


Figure 2 19159-19-IQC-Fluorescent Cell Image-1-05062021

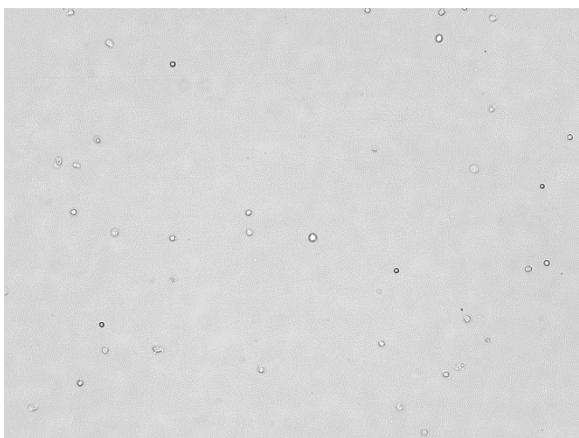


Figure 3 19159-19-IQC-Bright Field Cell Image-2-05062021

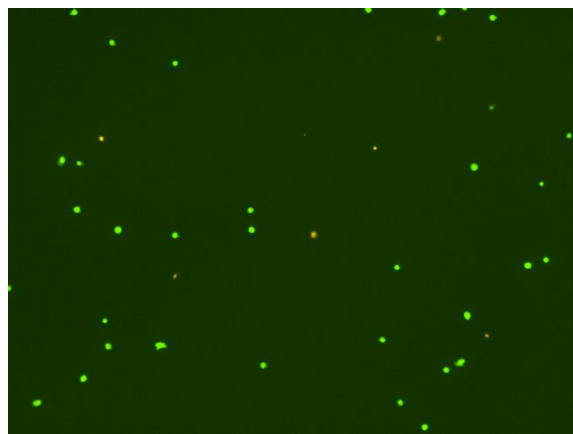


Figure 4 19159-19-IQC-Fluorescent Cell Image-2-05062021

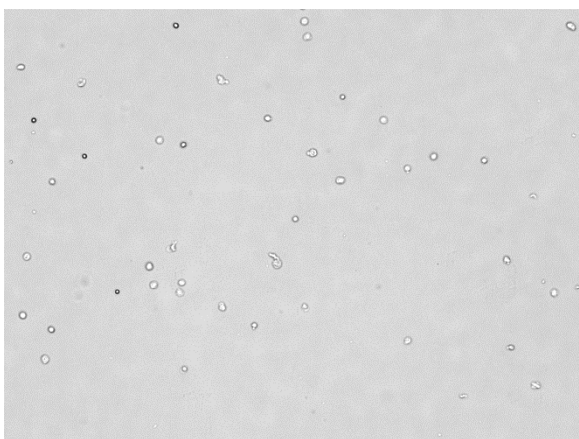


Figure 5 19159-19-IQC-Bright Field Cell Image-3-05062021

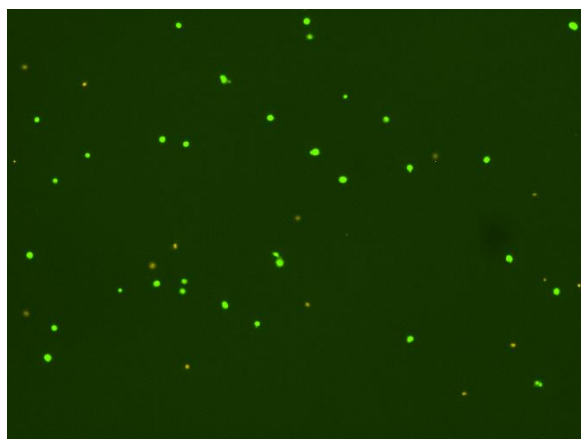


Figure 6 19159-19-IQC-Fluorescent Cell Image-3-05062021

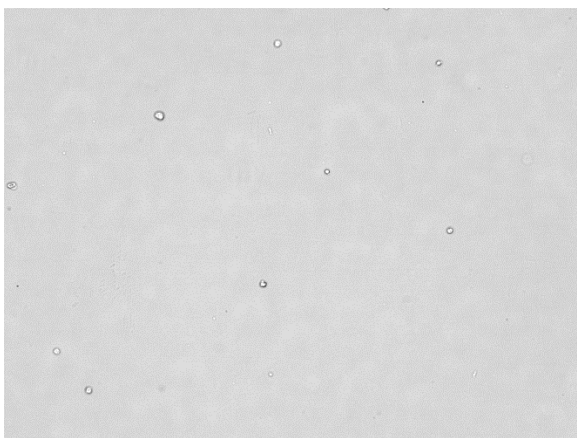


Figure 7 19159-19-IQC-Bright Field Cell Image-4-05062021

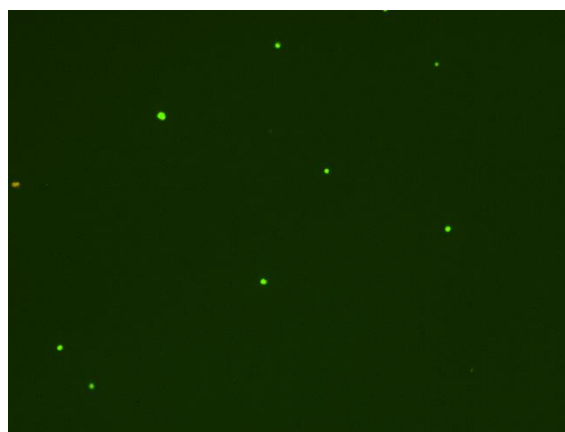


Figure 8 19159-19-IQC-Fluorescent Cell Image-4-05062021

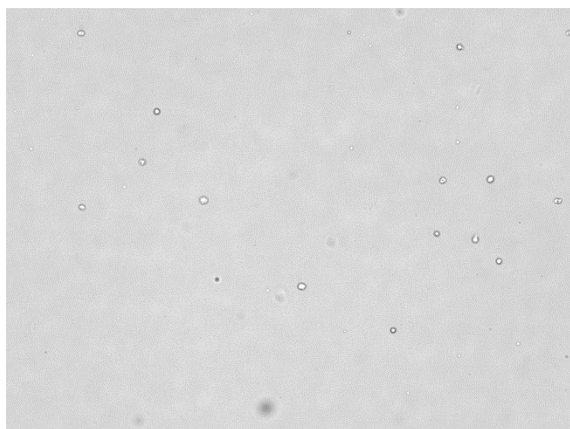


Figure 9 19159-19-IQC-Bright Field Cell Image-5-05062021

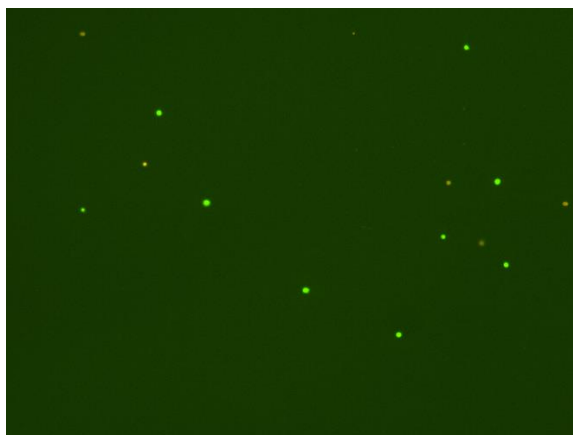


Figure 10 19159-19-IQC-Fluorescent Cell Image-5-05062021

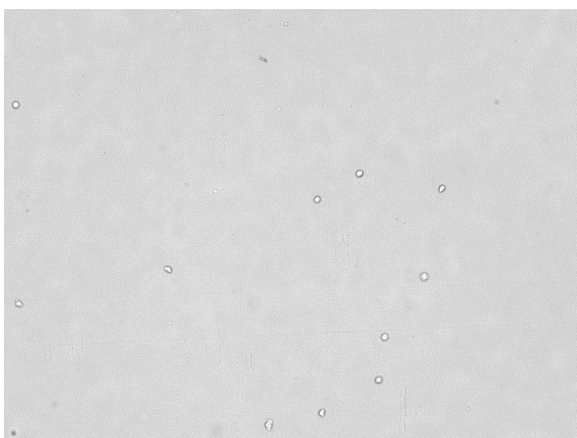


Figure 11 19159-19-IQC-Bright Field Cell Image-6-05062021

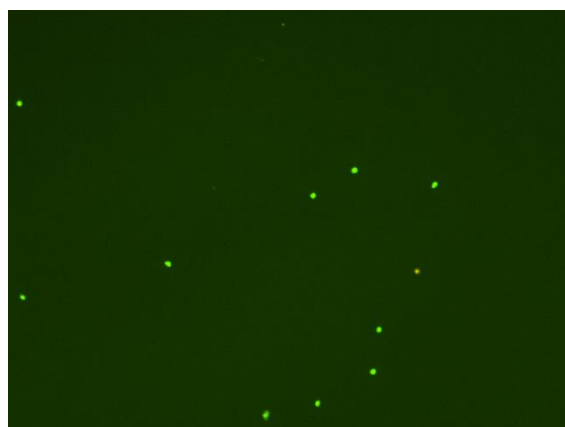


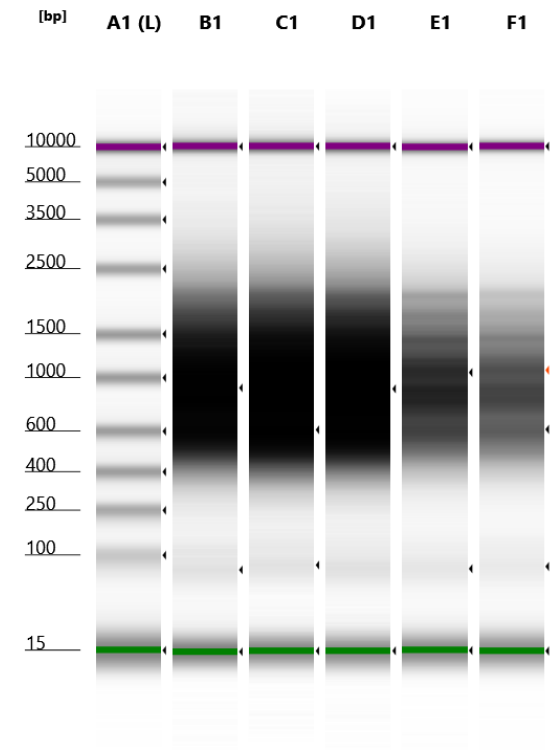
Figure 12 19159-19-IQC-Fluorescent Cell Image-6-05062021

## Sample ID Table & QC Results (cDNA)

Sample #	BGI Sample ID	Customer Sample ID	Sample Type	Sample Volume (ul)	BGI Concentration (ng/ul)	BGI Total Quantity (ng)
1	19159-19-01	CT26-5-1	cDNA	40	12.10	484.0
2	19159-19-02	CT26-5-2	cDNA	40	15.60	624.0
3	19159-19-03	CT26-5-3	cDNA	40	15.80	632.0
4	19159-19-04	CT26-5-4	cDNA	40	6.68	267.2
5	19159-19-05	CT26-5-5	N/A	N/A	N/A	N/A
6	19159-19-06	CT26-5-6	cDNA	40	5.14	205.6

TapeStation Image

Filename: 19159-19-cDNA-05062021.HSD5000

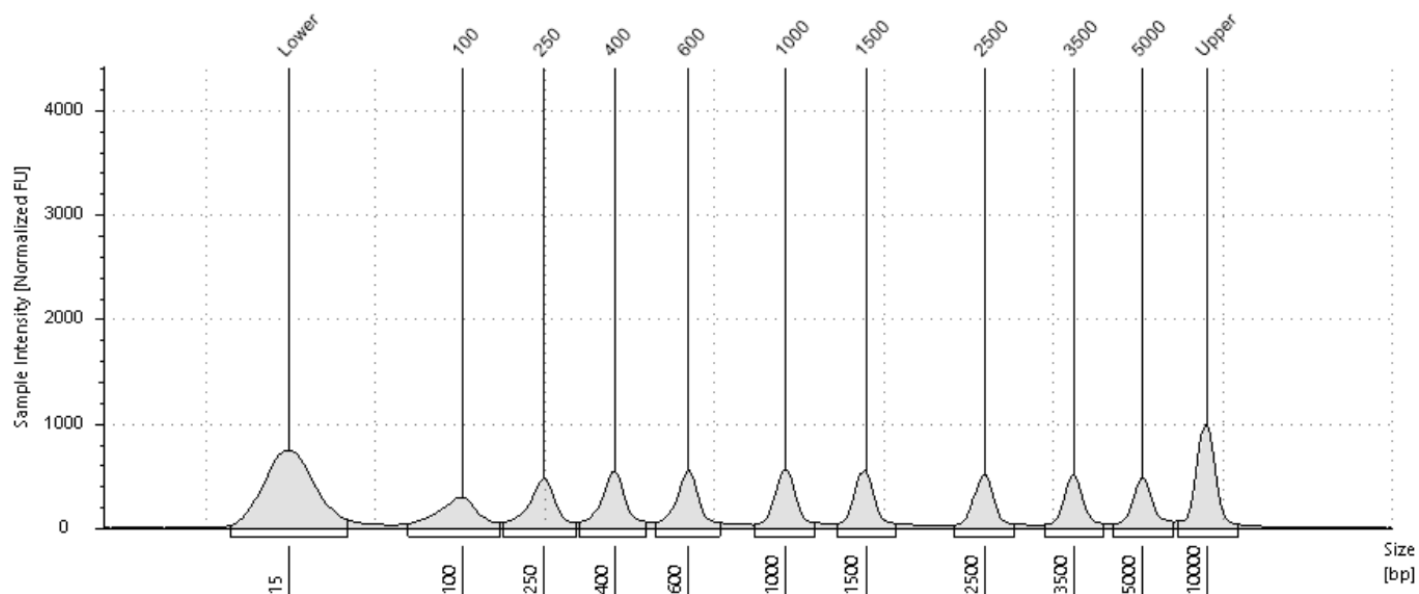


Default image (Contrast 100%)

Sample Info

Well	Conc. [pg/μl]	Sample Description	Alert	Observations
A1	1160	Ladder		Ladder
B1	4650	19159-19-01 cDNA		
C1	2590	19159-19-02 cDNA		
D1	6690	19159-19-03 cDNA		
E1	1030	19159-19-04 cDNA		
F1	1550	19159-19-06 cDNA		

## A1: Ladder



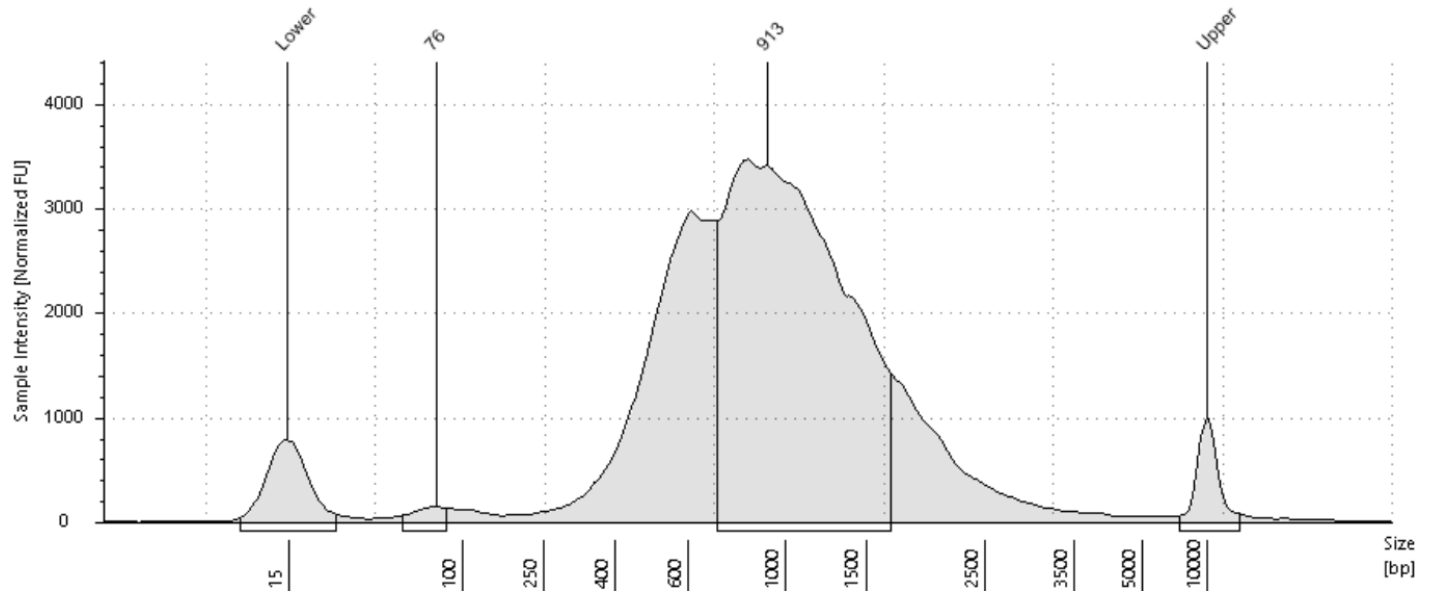
## Sample Table

Well	Conc. [pg/ $\mu$ l]	Sample Description	Alert	Observations
A1	1160	Ladder		Ladder

## Peak Table

Size [bp]	Calibrated Conc. [pg/ $\mu$ l]	Assigned Conc. [pg/ $\mu$ l]	Peak Molarity [pmol/l]	% Integrated Area	Peak Comment	Observations
15	358	-	36700	-		Lower Marker
100	129	-	1990	11.13		
250	142	-	872	12.21		
400	147	-	566	12.68		
600	140	-	359	12.09		
1000	130	-	200	11.22		
1500	125	-	129	10.81		
2500	117	-	72.1	10.11		
3500	114	-	50.2	9.85		
5000	115	-	35.3	9.90		
10000	180	180	27.7	-		Upper Marker

B1: 19159-19-01 cDNA

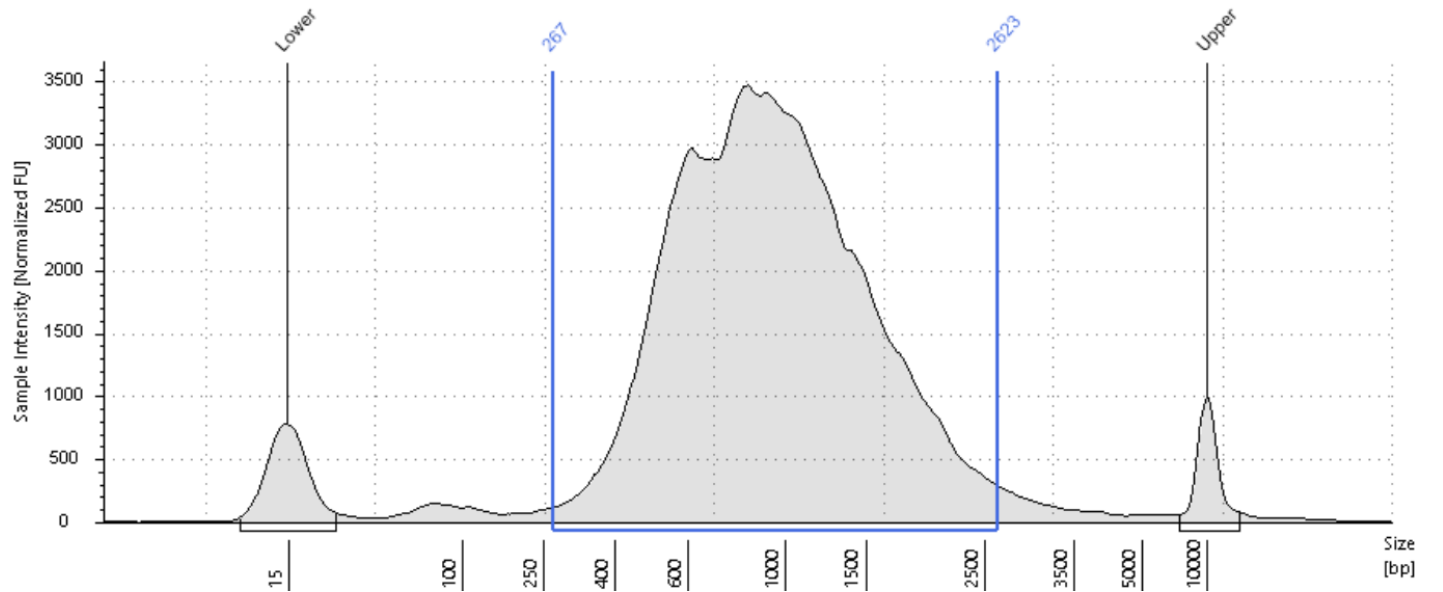


Sample Table

Well	Conc. [pg/μl]	Sample Description	Alert	Observations
B1	4650	19159-19-01 cDNA		


Peak Table

Size [bp]	Calibrated Conc. [pg/μl]	Assigned Conc. [pg/μl]	Peak Molarity [pmol/l]	% Integrated Area	Peak Comment	Observations
15	296	-	30300	-		Lower Marker
76	47.7	-	962	1.03		
913	4600	-	7760	98.97		
10000	180	180	27.7	-		Upper Marker

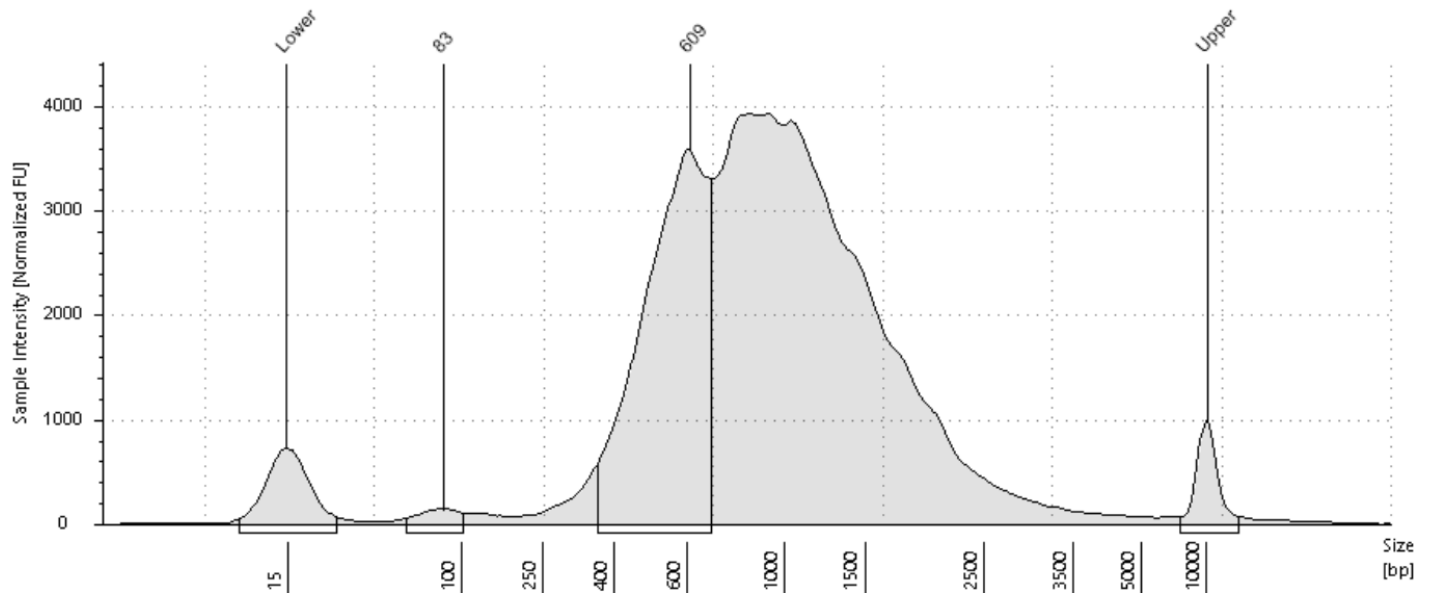




### Region Table

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/ $\mu$ l]	Region Molarity [pmol/l]	% of Total	Region Comment	Color
267	2623	1018	7540	13900	95.05		

C1: 19159-19-02 cDNA



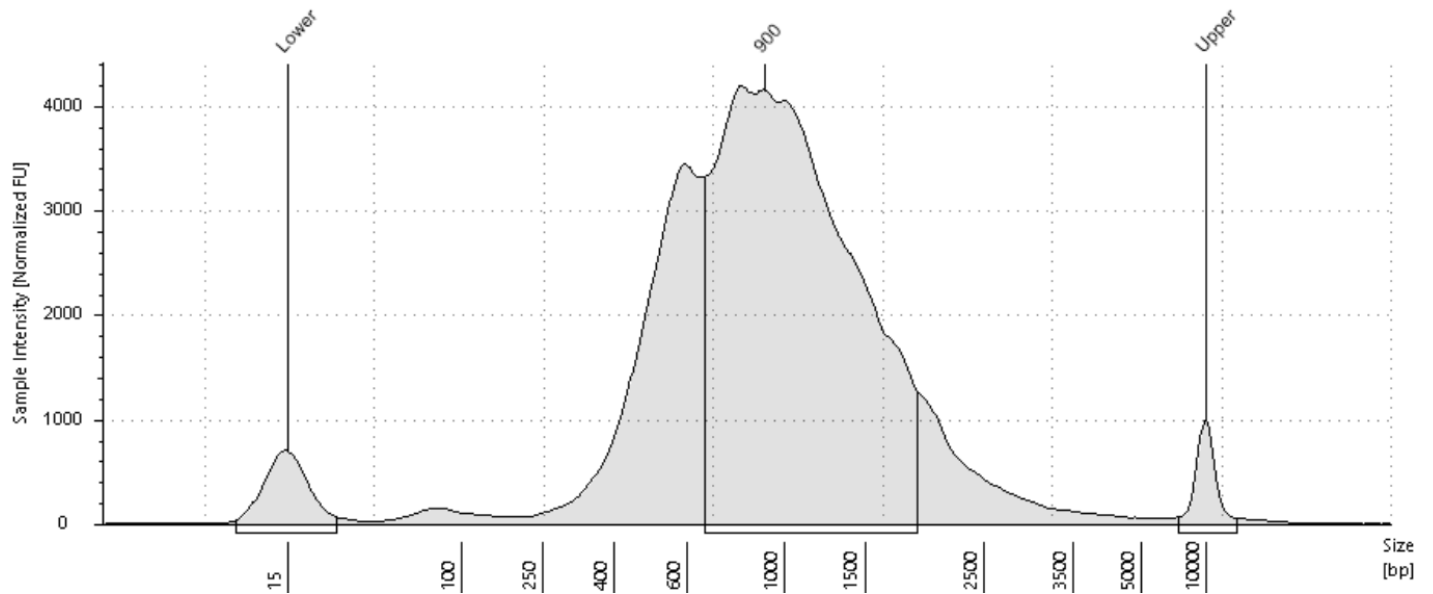
Sample Table

Well	Conc. [pg/μl]	Sample Description	Alert	Observations
C1	2590	19159-19-02 cDNA		

Peak Table

Size [bp]	Calibrated Conc. [pg/μl]	Assigned Conc. [pg/μl]	Peak Molarity [pmol/l]	% Integrated Area	Peak Comment	Observations
15	260	-	26600	-		Lower Marker
83	59.8	-	1110	2.31		
609	2530	-	6390	97.69		
10000	180	180	27.7	-		Upper Marker

D1: 19159-19-03 cDNA



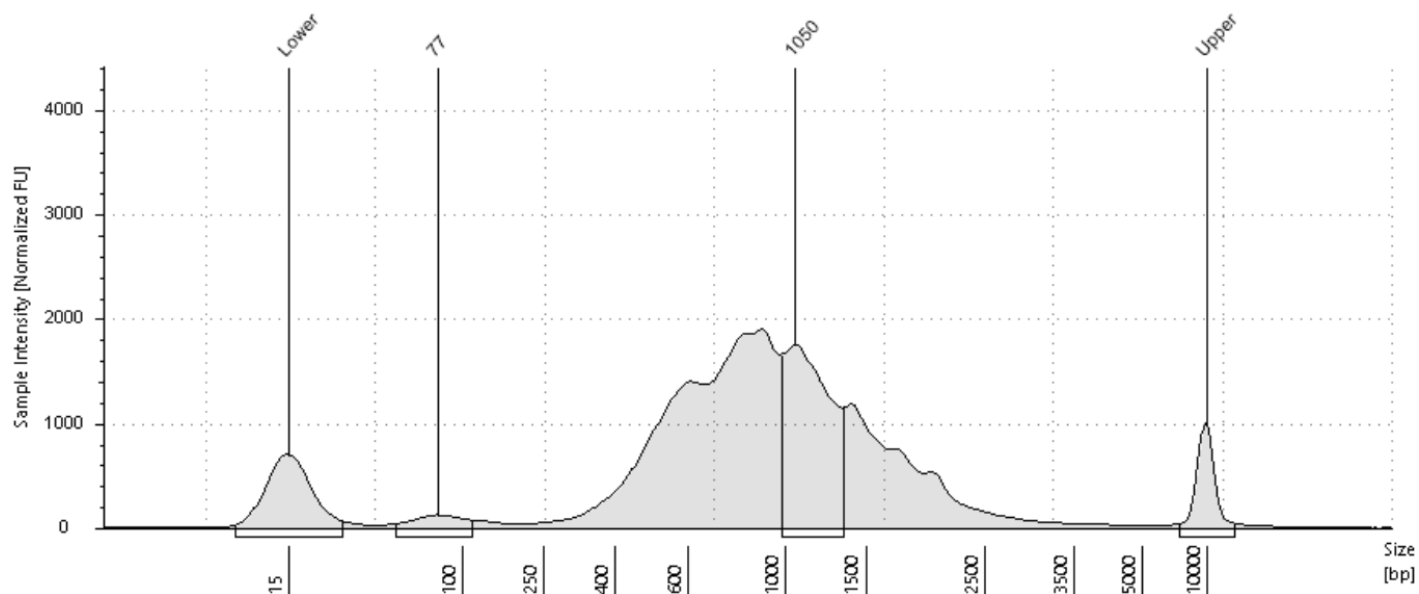
Sample Table

Well	Conc. [pg/μl]	Sample Description	Alert	Observations
D1	6690	19159-19-03 cDNA		

Peak Table

Size [bp]	Calibrated Conc. [pg/μl]	Assigned Conc. [pg/μl]	Peak Molarity [pmol/l]	% Integrated Area	Peak Comment	Observations
15	293	-	30100	-		Lower Marker
900	6690	-	11400	100.00		
10000	180	180	27.7	-		Upper Marker

E1: 19159-19-04 cDNA



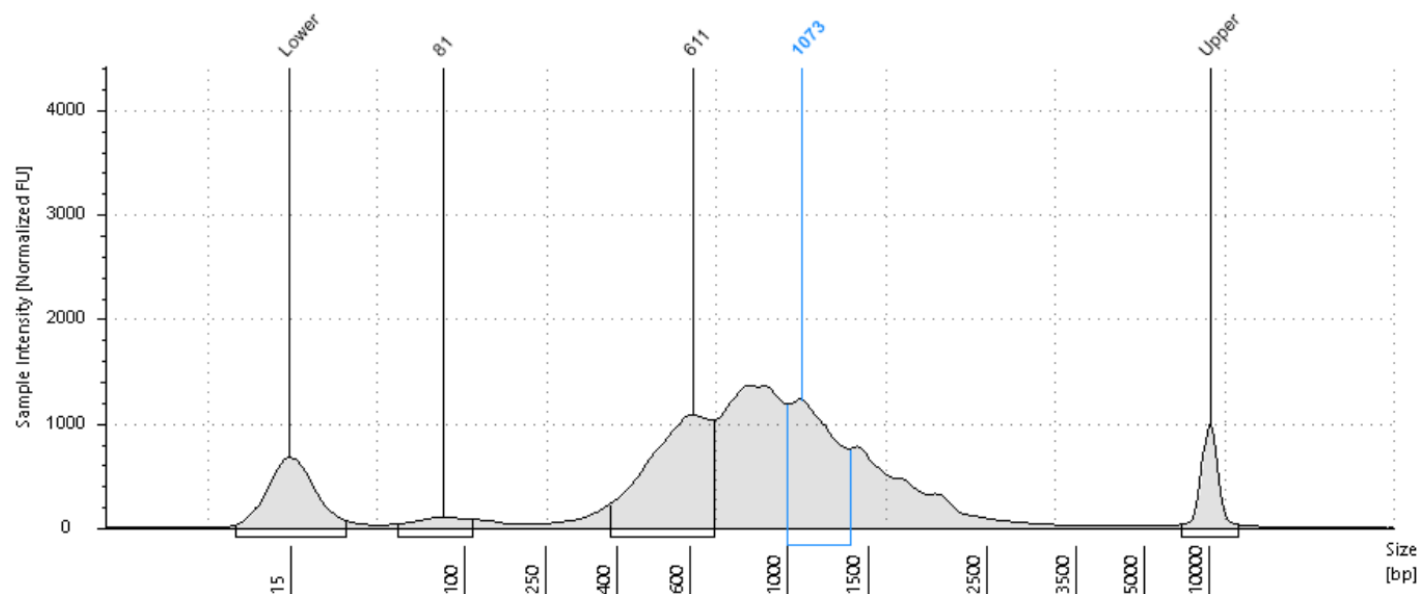
Sample Table

Well	Conc. [pg/ $\mu$ l]	Sample Description	Alert	Observations
E1	1030	19159-19-04 cDNA		

Peak Table

Size [bp]	Calibrated Conc. [pg/ $\mu$ l]	Assigned Conc. [pg/ $\mu$ l]	Peak Molarity [pmol/l]	% Integrated Area	Peak Comment	Observations
15	326	-	33500	-		Lower Marker
77	68.9	-	1390	6.69		
1050	962	-	1410	93.31		
10000	180	180	27.7	-		Upper Marker

F1: 19159-19-06 cDNA



Sample Table

Well	Conc. [pg/μl]	Sample Description	Alert	Observations
F1	1550	19159-19-06 cDNA		

Peak Table

Size [bp]	Calibrated Conc. [pg/μl]	Assigned Conc. [pg/μl]	Peak Molarity [pmol/l]	% Integrated Area	Peak Comment	Observations
15	328	-	33600	-		Lower Marker
81	61.1	-	1170	3.94		
611	811	-	2040	52.29		
1073	679	-	973	43.77		
10000	180	180	27.7	-		Upper Marker

## Sample QC Process & Guidelines

### Sample QC Process

BGI qualifies samples based on the processes below:

**DNA Quantity:**

Qubit 2.0 DNA HS Assay (Life Technologies, Grand Island, NY)

**DNA Quality**

1% Standard agarose gel and/or Tapestation genomic DNA Assay (Agilent Technologies, CA, USA)

**RNA Quantity:**

Qubit RNA HS assay (ThermoFisher).

**RNA Quality:**

Bioanalyzer 2100 Eukaryote Total RNA Nano (Agilent Technologies, CA, USA)

**Library Concentration & Quality:**

Qubit 2.0 DNA HS Assay (ThermoFisher), QuantStudio<sup>®</sup> 5 System (Applied Biosystems, USA)

Tapestation High Sensitivity D1000 Assay (Agilent Technologies, CA, USA)

### Sample QC Guidelines

Service	Quantity Required*	Volume	Sample Type
16s_rRNA_Sequencing	≥50 ng	≥ 10 ul	gDNA
10x_Genomics	request for information	request for information	request for information
ATAC-seq	request for information	request for information	request for information
ChIPseq	50ng (ChIPed); 1 ug (Input)	≥ 20 ul	gDNA
ddRADseq	1 ug	≥ 20 ul	gDNA
HLA	1 ug	≥ 20 ul	gDNA
ITS1 ITS 2	≥50 ng	≥ 10 ul	gDNA
LiquidGx	request for information	request for information	request for information
Metagenomics	100ng	≥ 20 ul	gDNA
Pacbio	10ug	≥ 20 ul	High quality gDNA
RNAseq	1 ug	≥ 20 ul	RNA
Sequencing Only - Hiseq	4nM	≥ 10 ul	Library
Sequencing Only - Novaseq	3nM	≥ 30 ul	Library
Sequencing Only - Miseq	4nM	≥ 10 ul	Library
Sequencing Only - Nextseq	4nM	≥ 10 ul	Library
Sequencing Only - Custom Primers	0.3 uM	R1: 5ml; Ind: 4ml; R2: 2ml	
smRNAseq	1 ug	≥ 20 ul	RNA
qPCR	request for information	request for information	request for information
WES	1 ug	≥ 20 ul	gDNA
WGBS	1 ug	≥ 20 ul	gDNA
WGS	500ng-1ug	≥ 20 ul	gDNA
Amplicon_based	500 ng	≥ 10 ul	gDNA