

Original Sample QC

General Information

Order Number AN00020747	Name of Customer	Sam White	Date of Order	2024-08-06
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Final QC Result of DNA sample(s)									
Order Registered Date	Total Ordered	Sample in Report	Pass	Fail	Hold				
2024-08-06	24	24	0	24	0				

Final QC Result of RNA sample(s)								
Order Registered Date	Total Ordered	Sample in Report	Pass	Fail	Hold			
N/A	N/A	N/A	N/A	N/A	N/A			

The QC criteria are specified for requirements needed for a single run. Occasionally, we may encounter a shortage of sample volume or amount due to various reasons such as library construction failure or dried samples. In such case, we may notify the client and request for additional samples.

To avoid consequential delays, it is recommended to double the amount of sample, if possible.

- * Pass: Samples automatically move forward to the next steps.
- * Hold: A specific instruction should be given by the client for further processing.

 PSOMAGEN, INC. does not proceed to the next step until we have received the client's confirmation.
- * Fail : Samples have failed to meet all the criteria set and cannot proceed to the next step.

Sample(s) will be put on hold until further written notice from the client.

As 5 ul was taken from the sample (library) QC purposes, the indicated volume represents 5 ul less than the total volume received.

QC Result of DNA

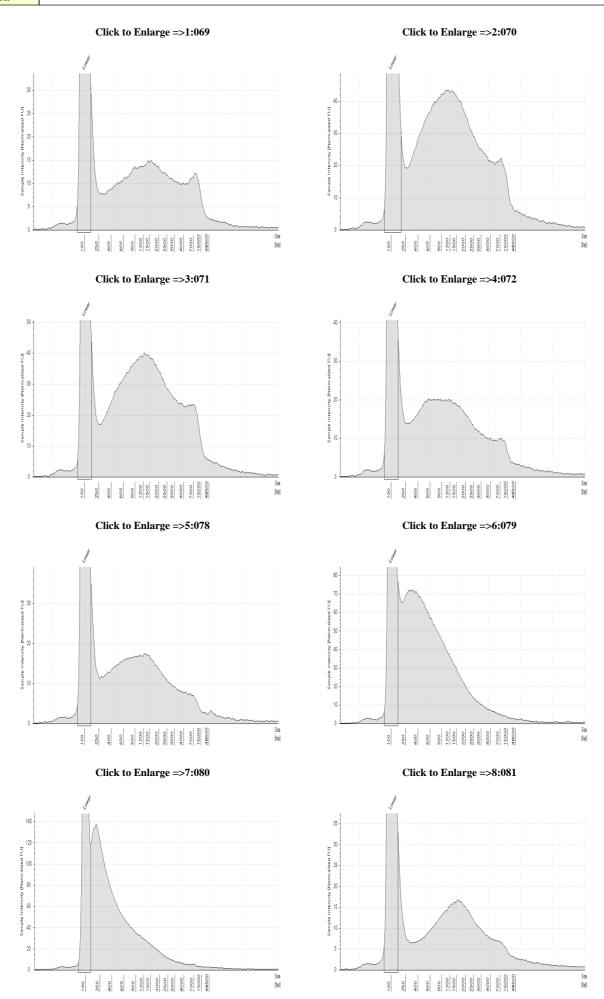
Worksheet Number	ANW240807S003Q002	Test Date	2024-08-07	Tested by	Jihun Kim
Comment					

^{*} AddVol : We add DW or DEPC. Because of low Sample volume.

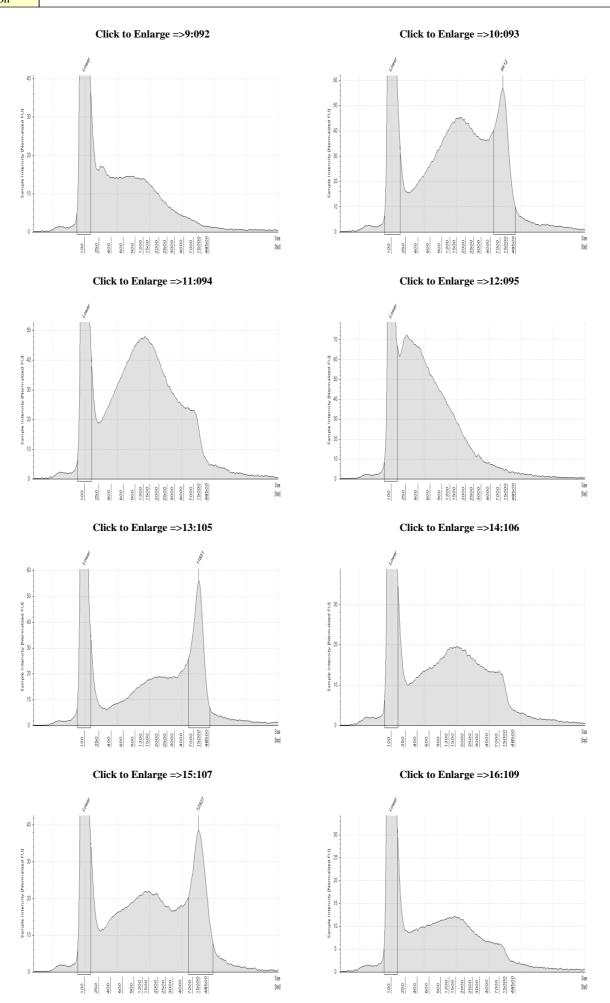
#	Sample Name	WSID	Conc. (ng/ul)	Add_Vol (ul)	Final Volume (ul)	Total Amount (ug)	DIN		Result*
1	069	ANW240807S003 AS0000179545	82.42	20	40	3.297	3.3	Fail	DIN
2	070	ANW240807S003 AS0000179546	131.62	20	38	5.002	2.8	Fail	DIN
3	071	ANW240807S003 AS0000179547	154.92	20	40	6.197	3	Fail	DIN
4	072	ANW240807S003 AS0000179548	66.31	20	40	2.652	2.5	Fail	DIN
5	078	ANW240807S003 AS0000179549	73.82	20	38	2.805	2.6	Fail	DIN
6	079	ANW240807S003 AS0000179550	38.46	20	39	1.5	1.5	Fail	DIN
7	080	ANW240807S003 AS0000179551	33.93	20	39	1.323	1.3	Fail	DIN
8	081	ANW240807S003 AS0000179552	66.08	20	36	2.379	3.2	Fail	DIN
9	092	ANW240807S003 AS0000179553	50.6	20	40	2.024	1.8	Fail	DIN

#	Sample Name	WSID	Conc. (ng/ul)	Add_Vol (ul)	Final Volume (ul)	Total Amount (ug)	DIN	Result*	
10	093	ANW240807S003 AS0000179554	103.87	20	40	4.155	3.9	Fail	DIN
11	094	ANW240807S003 AS0000179555	29.25	20	34	0.995	2.9	Fail	DIN
12	095	ANW240807S003 AS0000179556	38.72	20	39	1.51	1.6	Fail	DIN
13	105	ANW240807S003 AS0000179557	97.33	20	40	3.893	5.8	Fail	DIN
14	106	ANW240807S003 AS0000179558	101.74	20	40	4.07	3.3	Fail	DIN
15	107	ANW240807S003 AS0000179559	160.83	20	40	6.433	4	Fail	DIN
16	109	ANW240807S003 AS0000179560	43.81	20	38	1.665	2.7	Fail	DIN
17	239	ANW240807S003 AS0000179561	90.54	20	40	3.622	2.9	Fail	DIN
18	240	ANW240807S003 AS0000179562	20.43	20	39	0.797	1.3	Fail	DIN
19	241	ANW240807S003 AS0000179563	69.48	20	40	2.779	2.7	Fail	DIN
20	242	ANW240807S003 AS0000179564	45.81	20	39	1.787	1.6	Fail	DIN
21	269	ANW240807S003 AS0000179565	125.45	20	38	4.767	2.8	Fail	DIN
22	270	ANW240807S003 AS0000179566	108.91	20	40	4.356	2.4	Fail	DIN
23	271	ANW240807S003 AS0000179567	60.61	20	40	2.424	1.9	Fail	DIN
24	272	ANW240807S003 AS0000179568	55.15	20	30	1.655	1.9	Fail	DIN

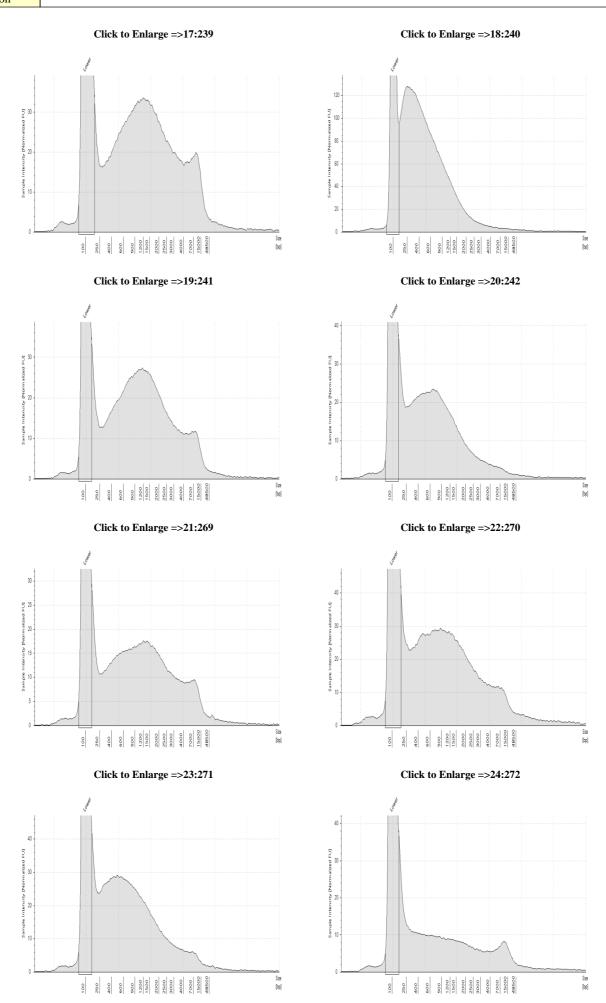
TapeStation gDNA Screen Tape



TapeStation gDNA Screen Tape



TapeStation gDNA Screen Tape



Sample QC Method

1. Quantity of DNA: Completed by *QuantiFluor dsDNA System using Victor X2 fluorometry.

PSOMAGEN, INC. quantifies the starting genomic material by fluorescence-based quantification method, rather than UV-spectrometer-based method.

This is due to fluorescence-based methods accurately quantitate dsDNA even in the presence of common contaminants by employing double-stranded DNA specific dye.

UV spectrometer methods based on 260 OD readings are prone to overestimating the DNA concentration due to the presence of RNA and other contaminants found in gDNA preparations.

* QuantiFluor dsDNA System (Promega, cat. E2670)

2. Integrity of DNA: Completed by Agilent genomic DNA screentape.

The Genomic DNA ScreenTape assay offers a numeric measurement DNA Integrity Number (DIN)

3. Quantify of RNA: Completed by Ribogreen** method using Victor X2 fluorometry.

PSOMAGEN, INC. quantifies the starting RNA material by fluorescence-based quantification method. **

** Ribogreen (Life technologies, cat# R11490)

4. Integrity of RNA: Completed by Agilent RNA screentape.

We check total RNA integrity using an Agilent Technologies 2100 Bioanalyzer or TapeStation with an RNA Integrity Number (RIN) value greater than or equal to 7. We recommend adding DNase at the RNA isolation step to maximize the quality of RNA.

Sample QC Criteria

Platform	Library Type	Library Kit	Conc.(ng/ul)	Total Amount	DIN	etc
NovaSeqX	Whole Genome library	TruSeq Nano DNA (350)	-	0.100ug	7	
NovaSeqX	Whole Genome library	TruSeq Nano DNA (550)	-	0.200ug	7	
NovaSeqX	Whole Genome library	TruSeq DNA PCR Free (350)	-	0.500ug	7	
NovaSeqX	Whole Genome library	TruSeq DNA PCR Free (550)	-	1.000ug	7	
NovaSeqX	Whole Genome library	Nextera DNA XT	-	0.001ug	7	
NovaSeqX	Whole Genome library	Accel Methyl-Seq DNA library	-	0.100ug	7	
NovaSeqX	Whole Genome library	TruSeq ChIP-seq library	-	0.010ug	7	
NovaSeqX	Whole Genome library	Plexwell LP384	-	0.010ug	7	
NovaSeqX	Whole Genome library	Plexwell 96	-	0.010ug	7	
NovaSeqX	Whole Genome library	Plexwell 384	-	0.010ug	7	
NovaSeqX	Whole Genome library	Riptide	-	0.050ug	7	
NovaSeqX	Whole Genome library	Nextera DNA flex	-	0.010ug	7	
NovaSeqX	Whole Genome library	KAPAHyper(for SkrybAmp)	-	0.500ug	7	
NovaSeqX	Whole Genome library	KAPA hyper library preparation (std)	-	0.500ug	7	
NovaSeqX	Whole Genome library	Accel-NGS 2S PCR-free(cfDNA)	-	0.010ug	-	