

BGI Sample Testing Report

1. Project Information

Report No.: THKb15121103

Project Name	UW - Sam ***** - Sam White - de-novo genome Panopea generosa			Project No.	F15FTSUSAT0328		
Customer Name	Steven Roberts			Customer Unit	Univ. of Washington		
Lab Sample Collector	WONGWINGLEUNG			Lab Sample Receiving Date	20151211		
Lab Sample Tester	yuttszfung, wongwingleung			Lab Sample Testing Date	20151211		
Reported by	yuttszfung	Inspected by	Wong Wai Man Vivien	Approved by	Wong Wai Man Vivien	Report Date	20151211

2. Sample Test Method

- ①Method of concentration determination: ☒ Qubit Fluorometer、☐ NanoDrop、☐ Microplate Reader
 ②Method of sample integrity test: ☒ Agarose Gel Electrophoresis

3. Sample Test Result

No.	Sample Name	Sample Number	Tube No.	Concentration(ng/ μL)	Volume(μL)	Total Mass(μg)	sample Integrity	Library type	Test result	Remark
1	geoduck_01	8521512001309	1	110	148	16.28	Degraded slightly	10K Mate Pair	Level D	The sample is degraded slightly,The total mass is too low,proposed to increase the amount of sample.
2	geoduck_01	8521512001309	1	110	148	16.28	Degraded slightly	5k/6K Mate Pair	Level D	The sample is degraded slightly,The total mass is too low,proposed to increase the amount of sample.
3	geoduck_01	8521512001309	1	110	148	16.28	Degraded slightly	2K Mate Pair	Level C	The sample is degraded slightly,The total mass is too lower,proposed to increase the amount of sample.
4	geoduck_01	8521512001309	1	110	148	16.28	Degraded slightly	PCR-free	Level B	
5	geoduck_01	8521512001309	1	110	148	16.28	Degraded slightly	≤800bp Insert Size	Level A	
6	geoduck_02	8521512001310	1	101	85	8.59	Degraded slightly	≤800bp Insert Size	Level A	
7	geoduck_02	8521512001310	1	101	85	8.59	Degraded slightly	PCR-free	Level C	The sample is degraded slightly,the total mass is too low,proposed to resend the sample.
8	geoduck_02	8521512001310	1	101	85	8.59	Degraded slightly	2K Mate Pair	Level D	The sample is degraded slightly, The concentration of the sample is too lower,The total mass is too

										low, proposed to resend the sample.
9	geoduck_02	8521512001310	1	101	85	8.59	Degraded slightly	10K Mate Pair	Level D	The sample is degraded slightly, The concentration of the sample is too lower, The total mass is too low, proposed to resend the sample.
10	geoduck_02	8521512001310	1	101	85	8.59	Degraded slightly	5k/6K Mate Pair	Level D	The sample is degraded slightly, The concentration of the sample is too lower, The total mass is too low, proposed to resend the sample.
11	geoduck_03	8521512001311	1	31.4	56	1.76	Degraded slightly	PCR-free	Level D	The sample is degraded slightly, the total mass is too low, proposed to resend the sample.
12	geoduck_03	8521512001311	1	31.4	56	1.76	Degraded slightly	2K Mate Pair	Level D	The sample is degraded slightly, The concentration of the sample is too lower, The total mass is too low, proposed to resend the sample.
13	geoduck_03	8521512001311	1	31.4	56	1.76	Degraded slightly	5k/6K Mate Pair	Level D	The sample is degraded slightly, The concentration of the sample is too lower, The total mass is too low, proposed to resend the sample.
14	geoduck_03	8521512001311	1	31.4	56	1.76	Degraded Moderate	10K Mate Pair	Level D	The sample is degraded partly, The concentration of the sample is too lower, The total mass is too low, proposed to resend the sample.
15	geoduck_03	8521512001311	1	31.4	56	1.76	Degraded slightly	≤800bp Insert Size	Level B	

Note*:

- The test result based on the 《DNA sequencing sample quality standards》 explains whether the testing sample meets the requirement of library construction.
 - Level A means the sample is qualified, and the amount of sample is sufficient for two or more library constructions.
 - Level B means the sample is qualified, but the amount of sample only satisfies one time library construction.
 - Level C means the sample does not totally meet the requirements of library construction and sequencing. BGI can try to construct the library but the quality of the sequence is not guaranteed
 - Level D means the sample does not meet the requirements of library construction and sequencing. BGI does not suggest in using this sample.
- According to BGI's data, samples of level A and level B are qualified for library construction.
- According to BGI's data, the risks of library construction for sample of level C or level D are listed below:
 - The deficiency of the quantity: There may be the risk of failure in library construction and the yield of library of experiment may be too low to sequencing, and the database of low yield for sequencing may lead to poor randomness.
 - Degradation of sample: It may cause high duplication rate of library and insert fragment will be abnormal."
 - Protein contamination: It maybe effect the result of the 20-40K library purification and reduce all kinds of enzyme reaction's efficiency.
 - RNA contamination: It possibly effects the DNA concentration quantitative accuracy.
- If the partner insists on using the sample of level C or level D, the risk and responsibility is taken by the cooperative partner.

5. Other notes:
- a) Samples are contaminated by RNA.

4. Appendix

- Appendix 1: Test results of Qubit Fluorometer or Microplate Reader
- Appendix 2: Test results of Agarose Gel Electrophoresis
- Appendix 3: Original information of sample

5. Statement

1. The results shown in this report refer only to the sample of the report unless otherwise stated.
2. This test report cannot be copied partly without the prior written permission of the Lab.

Appendix 1: Test results of Qubit Fluorometer or Microplate Reader

1. Pre-treatment
- After the sample melted the ice, centrifuged and fully mixed, take appropriate samples for testing.

2. Test Result

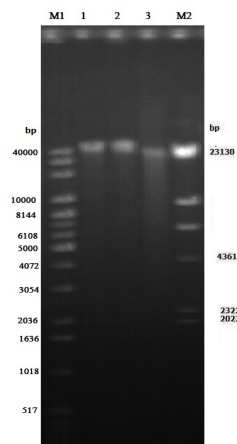
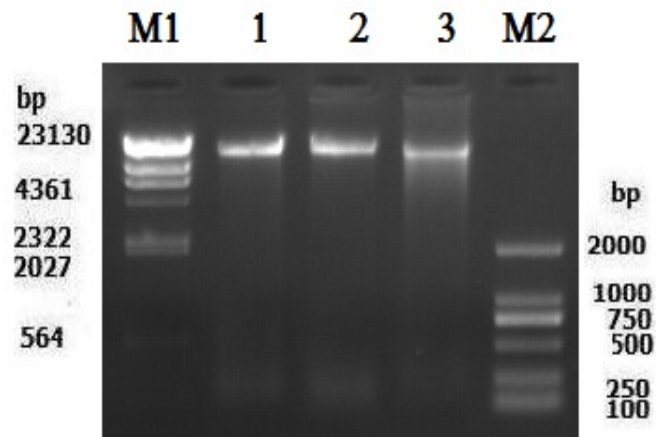
Sample Name	Sample Number	Test Instrument	Test Kit	Dilution Ratio(×)	Test Volume (μL)	Test Concentration(ng/μL)	Concentration of original sample(ng/μL)	Remark
geoduck_01	8521512001309	Qubit	DNA BR	1	1	110	110	
geoduck_01	8521512001309	Qubit	DNA BR	1	1	110	110	
geoduck_01	8521512001309	Qubit	DNA BR	1	1	110	110	
geoduck_01	8521512001309	Qubit	DNA BR	1	1	110	110	
geoduck_01	8521512001309	Qubit	DNA BR	1	1	110	110	
geoduck_02	8521512001310	Qubit	DNA BR	1	1	101	101	
geoduck_02	8521512001310	Qubit	DNA BR	1	1	101	101	
geoduck_02	8521512001310	Qubit	DNA BR	1	1	101	101	
geoduck_02	8521512001310	Qubit	DNA BR	1	1	101	101	
geoduck_02	8521512001310	Qubit	DNA BR	1	1	101	101	
geoduck_03	8521512001311	Qubit	DNA BR	1	1	31.4	31.4	
geoduck_03	8521512001311	Qubit	DNA BR	1	1	31.4	31.4	
geoduck_03	8521512001311	Qubit	DNA BR	1	1	31.4	31.4	
geoduck_03	8521512001311	Qubit	DNA BR	1	1	31.4	31.4	
geoduck_03	8521512001311	Qubit	DNA BR	1	1	31.4	31.4	

Appendix 2: Test results of agarose gel electrophoresis

1. Pre-treatment
- After the sample melted the ice, centrifuged and fully mixed, take appropriate samples for testing.
2. Test Parameter
- Concentration of Agarose Gel: 1 %; Voltage: 150 V; Electrophoresis Time: 40 min

3. Test Result

(1) Electrophoretogram:



Lane No.	Sample Name	Dilution Ratio(×)	Test Volume(μL)	Sample Integrity	Remark
M1	λ-Hind III digest(Takara)	1	3		
1	geoduck_01	1	0.91	Degraded slightly	
1	geoduck_01	1	0.91	Degraded slightly	
1	geoduck_01	1	0.91	Degraded slightly	
1	geoduck_01	1	0.91	Degraded slightly	
1	geoduck_01	1	0.91	Degraded slightly	
2	geoduck_02	1	0.99	Degraded slightly	
2	geoduck_02	1	0.99	Degraded slightly	
2	geoduck_02	1	0.99	Degraded slightly	
2	geoduck_02	1	0.99	Degraded slightly	
2	geoduck_02	1	0.99	Degraded slightly	
3	geoduck_03	1	3.18	Degraded slightly	
3	geoduck_03	1	3.18	Degraded slightly	
3	geoduck_03	1	3.18	Degraded slightly	
3	geoduck_03	1	3.18	Degraded Moderate	
3	geoduck_03	1	3.18	Degraded slightly	
M2	1kb Extension DNA Ladder (Invitrogen)	1	1		

Appendix 3: Original information of sample

[illegible]

Sample Name	Species	No. of Tubes	Concentration (ng/ μ L)	Volume (μ L)	Total Quantity (μ g)	Fragment Size	OD260/280	OD260/230	Remark
geoduck_01	Panopea generosa	1	105	200	21		0	0	
geoduck_01	Panopea generosa	1	105	200	21		0	0	
geoduck_01	Panopea generosa	1	105	200	21		0	0	
geoduck_01	Panopea generosa	1	105	200	21		0	0	
geoduck_01	Panopea generosa	1	105	200	21		0	0	
geoduck_02	Panopea generosa	1	100	100	10		0	0	
geoduck_02	Panopea generosa	1	100	100	10		0	0	
geoduck_02	Panopea generosa	1	100	100	10		0	0	
geoduck_02	Panopea generosa	1	100	100	10		0	0	
geoduck_02	Panopea generosa	1	100	100	10		0	0	
geoduck_03	Panopea generosa	1	34. 5	75	2. 5		0	0	
geoduck_03	Panopea generosa	1	34. 5	75	2. 5		0	0	
geoduck_03	Panopea generosa	1	34. 5	75	2. 5		0	0	
geoduck_03	Panopea generosa	1	34. 5	75	2. 5		0	0	
geoduck_03	Panopea generosa	1	34. 5	75	2. 5		0	0	

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