BGI Sample Testing Report

1. Project Information

Report No.: THKn15123101

Project Name	UW - Sam ***** - Sam White - 96 sample GBS			Project No.	F15FTSUSAT0768		
Customer Name	Steven Roberts			Customer Unit	Univ. of Washington		
Lab Sample Collector	yimkawing			Lab Sample Receiving Date	20151215		
Lab Sample Tester	wongwaiman,yutszfung,wongwingleung			Lab Sample Testing Date	20151231		
Reported by	yutszfung	Inspected by	Wong Wai Man Vivien	Approved by	Wong Wai Man Vivien	Report Date	20151231

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	Tissue Name	Tissue Number	Tube No.	Concentration(ng/μL)	Volume(μL)	Total Mass(μg)	Sample Integrity	Library Type	Test Result	Remark
1	1NF 1A	HKYD15121969_A	1NF 1	T8521512000194	1	102	72	7.344	Degraded slightly	GBS-seq	Level A	
2	1NF 2A	HKYD15121970_A	1NF 2	T8521512000195	1	80.6	55	4.433	Degraded slightly	GBS-seq	Level A	
3	1NF 3A	HKYD15121971_A	1NF 3	T8521512000196	1	61.4	49	3.0086	Degraded Moderate	GBS-seq	Level C	The sample is degraded partly,proposed to resend the sample.
4	1NF 4A	HKYD15121972_A	1NF 4	T8521512000197	1	69	54	3.726	Degraded slightly	GBS-seq	Level A	
5	1NF 5A	HKYD15121973_A	1NF 5	T8521512000198	1	56.2	56	3.1472	Degraded slightly	GBS-seq	Level A	
6	1NF 6A	HKYD15121974_A	1NF 6	T8521512000199	1	34.8	51	1.7748	Degraded slightly	GBS-seq	Level A	
7	1NF 7A	HKYD15121975_A	1NF 7	T8521512000200	1	56.2	46	2.5852	Degraded slightly	GBS-seq	Level A	
8	1NF 8A	HKYD15121976_A	1NF 8	T8521512000201	1	56	52	2.912	Degraded slightly	GBS-seq	Level A	
9	1NF 9A	HKYD15121977_A	1NF 9	T8521512000202	1	86.6	54	4.6764	Degraded slightly	GBS-seq	Level A	
10	1NF 10A	HKYD15121978_A	1NF 10	T8521512000203	1	28.2	54	1.5228	Degraded slightly	GBS-seq	Level A	
11	1NF 11A	HKYD15121979_A	1NF 11	T8521512000204	1	48.6	55	2.673	Degraded slightly	GBS-seq	Level A	
12	1NF 12A	HKYD15121980_A	1NF 12	T8521512000205	1	49.4	54	2.6676	Degraded slightly	GBS-seq	Level A	
13	1NF 13A	HKYD15121981_A	1NF 13	T8521512000206	1	12.8	51	0.6528	Degraded slightly	GBS-seq	Level A	
14	1NF 14A	HKYD15121982_A	1NF 14	T8521512000207	1	39.2	47	1.8424	Degraded slightly	GBS-seq	Level A	
15	1NF 15A	HKYD15121983_A	1NF 15	T8521512000208	1	29.2	48	1.4016	Degraded slightly	GBS-seq	Level A	
16	1NF 16A	HKYD15121984_A	1NF 16	T8521512000209	1	26	50	1.3	Degraded slightly	GBS-seq	Level A	
17	1NF 17A	HKYD15121985_A	1NF 17	T8521512000210	1	50.2	55	2.761	Degraded slightly	GBS-seq	Level A	
18	1NF 18A	HKYD15121986_A	1NF 18	T8521512000211	1	15	54	0.81	Degraded slightly	GBS-seq	Level A	
19	1NF 19A	HKYD15121987_A	1NF 19	T8521512000212	1	38.4	52	1.9968	Degraded slightly	GBS-seq	Level A	

20	1NF 20A	HKYD15121988_A	1NF 20	T8521512000213	1	39.2	52	2.0384	Degraded slightly	GBS-seq	Level A	
21	1NF 21A	HKYD15121989_A	1NF 21	T8521512000214	1	42.2	55	2.321	Degraded slightly	GBS-seq	Level A	
22	1NF 22A	HKYD15121990_A	1NF 22	T8521512000215	1	49.6	51	2.5296	Degraded slightly	GBS-seq	Level A	
23	1NF 23A	HKYD15121991_A	1NF 23	T8521512000216	1	45.6	48	2.1888	Degraded slightly	GBS-seq	Level A	
24	1NF 24A	HKYD15121992_A	1NF 24	T8521512000217	1	17.6	50	0.88	Degraded slightly	GBS-seq	Level A	
25	1NF 25A	HKYD15121993_A	1NF 25	T8521512000218	1	15.4	51	0.7854	Degraded slightly	GBS-seq	Level A	
26	1NF 26A	HKYD15121994_A	1NF 26	T8521512000219	1	74.8	55	4.114	Degraded slightly	GBS-seq	Level A	
27	1NF 27A	HKYD15121995_A	1NF 27	T8521512000220	1	55	55	3.025	Degraded slightly	GBS-seq	Level A	
28	1NF 28A	HKYD15121996_A	1NF 28	T8521512000221	1	35	55	1.925	Degraded slightly	GBS-seq	Level A	
29	1NF 29A	HKYD15121997_A	1NF 29	T8521512000222	1	98.6	55	5.423	Degraded slightly	GBS-seq	Level A	
30	1NF 30A	HKYD15121998_A	1NF 30	T8521512000223	1	115	50	5.75	Degraded slightly	GBS-seq	Level A	
31	1NF 31A	HKYD15121999_A	1NF 31	T8521512000224	1	114	48	5.472	Degraded slightly	GBS-seq	Level A	
32	1NF 32A	HKYD15122000_A	1NF 32	T8521512000225	1	49.2	51	2.5092	Degraded slightly	GBS-seq	Level A	
33	1NF 33A	HKYD15122001_A	1NF 33	T8521512000226	1	79.6	55	4.378	Degraded slightly	GBS-seq	Level A	
34	1NF 34A	HKYD15122002_A	1NF 34	T8521512000227	1	39.6	55	2.178	Degraded slightly	GBS-seq	Level A	
35	1NF 35A	HKYD15122003_A	1NF 35	T8521512000228	1	21.4	52	1.1128	Degraded slightly	GBS-seq	Level A	
36	1NF 36A	HKYD15122004_A	1NF 36	T8521512000229	1	77.8	53	4.1234	Degraded slightly	GBS-seq	Level A	
37	1SN 1A	HKYD15122005_A	1SN 1	T8521512000230	1	59.8	50	2.99	Degraded slightly	GBS-seq	Level A	
38	1SN 2A	HKYD15122006_A	1SN 2	T8521512000231	1	46.8	76	3.5568	Degraded slightly	GBS-seq	Level A	
39	1SN 3A	HKYD15122007_A	1SN 3	T8521512000232	1	15.7	76	1.1932	Degraded slightly	GBS-seq	Level A	
40	1SN 4A	HKYD15122008_A	1SN 4	T8521512000233	1	38	72	2.736	Degraded slightly	GBS-seq	Level A	
41	1SN 5A	HKYD15122009_A	1SN 5	T8521512000234	1	17.5	61	1.0675	Degraded slightly	GBS-seq	Level A	
42	1SN 6A	HKYD15122010_A	1SN 6	T8521512000235	1	80.6	62	4.9972	Degraded slightly	GBS-seq	Level A	
43	1SN 7A	HKYD15122011_A	1SN 7	T8521512000236	1	87	72	6.264	Degraded slightly	GBS-seq	Level A	
44	1SN 8A	HKYD15122012_A	1SN 8	T8521512000237	1	108	61	6.588	Degraded slightly	GBS-seq	Level A	
45	1SN 9A	HKYD15122013_A	1SN 9	T8521512000238	1	15.8	73	1.1534	Degraded slightly	GBS-seq	Level A	
46	1SN 10A	HKYD15122014_A	1SN 10	T8521512000239	1	69.4	74	5.1356	Degraded slightly	GBS-seq	Level A	
47	1SN 11A	HKYD15122015_A	1SN 11	T8521512000240	1	53.6	80	4.288	Degraded slightly	GBS-seq	Level A	
48	1SN 12A	HKYD15122016_A	1SN 12	T8521512000241	1	30.6	75	2.295	Degraded slightly	GBS-seq	Level A	
49	1SN 13A	HKYD15122017_A	1SN 13	T8521512000242	1	96	77	7.392	Degraded slightly	GBS-seq	Level A	
50	1SN 14A	HKYD15122018_A	1SN 14	T8521512000243	1	33.8	76	2.5688	Degraded slightly	GBS-seq	Level A	
51	1SN 15A	HKYD15122019_A	1SN 15	T8521512000244	1	48.6	77	3.7422	Degraded slightly	GBS-seq	Level A	
52	1SN 16A	HKYD15122020_A	1SN 16	T8521512000245	1	66	78	5.148	Degraded slightly	GBS-seq	Level A	
53	1SN 17A	HKYD15122021_A	1SN 17	T8521512000246	1	65.4	79	5.1666	Degraded slightly	GBS-seq	Level A	
54	1SN 18A	HKYD15122022_A	1SN 18	T8521512000247	1	79.4	83	6.5902	Degraded slightly	GBS-seq	Level A	
55	1SN 19A	HKYD15122023_A	1SN 19	T8521512000248	1	22.2	74	1.6428	Degraded slightly	GBS-seq	Level A	
56	1SN 20A	HKYD15122024_A	1SN 20	T8521512000249	1	42.8	77	3.2956	Degraded slightly	GBS-seq	Level A	

57	1SN 21A	HKYD15122025_A	1SN 21	T8521512000250	1	36.6	76	2.7816	Degraded slightly	GBS-seq	Level A	
58	1SN 22A	HKYD15122026_A	1SN 22	T8521512000251	1	80.8	69	5.5752	Degraded slightly	GBS-seq	Level A	
59	1SN 23A	HKYD15122027_A	1SN 23	T8521512000252	1	35.6	72	2.5632	Degraded slightly	GBS-seq	Level A	
60	1SN 24A	HKYD15122028_A	1SN 24	T8521512000253	1	66.6	76	5.0616	Degraded slightly	GBS-seq	Level A	
61	1SN 25A	HKYD15122029_A	1SN 25	T8521512000254	1	111	80	8.88	Degraded slightly	GBS-seq	Level A	
62	1SN 26A	HKYD15122030_A	1SN 26	T8521512000255	1	47.2	80	3.776	Degraded slightly	GBS-seq	Level A	
63	1SN 27A	HKYD15122031_A	1SN 27	T8521512000256	1	83	77	6.391	Degraded slightly	GBS-seq	Level A	
64	1SN 28A	HKYD15122032_A	1SN 28	T8521512000257	1	57.8	76	4.3928	Degraded slightly	GBS-seq	Level A	
65	1SN 29A	HKYD15122033_A	1SN 29	T8521512000258	1	5.9	64	0.3776	Degraded slightly	GBS-seq	Level A	
66	1SN 30A	HKYD15122034_A	1SN 30	T8521512000259	1	75.4	73	5.5042	Degraded slightly	GBS-seq	Level A	
67	1SN 31A	HKYD15122035_A	1SN 31	T8521512000260	1	76	78	5.928	Degraded slightly	GBS-seq	Level A	
68	1SN 32A	HKYD15122036_A	1SN 32	T8521512000261	1	57.2	63	3.6036	Degraded slightly	GBS-seq	Level A	
69	1SN 33A	HKYD15122037_A	1SN 33	T8521512000262	1	121	75	9.075	Degraded slightly	GBS-seq	Level A	
70	1SN 34A	HKYD15122038_A	1SN 34	T8521512000263	1	88	70	6.16	Degraded slightly	GBS-seq	Level A	
71	1SN 35A	HKYD15122039_A	1SN 35	T8521512000264	1	36	74	2.664	Degraded slightly	GBS-seq	Level A	
72	1SN 36A	HKYD15122040_A	1SN 36	T8521512000265	1	37.4	78	2.9172	Degraded slightly	GBS-seq	Level A	
73	1HL 1A	HKYD15122041_A	1HL 1	T8521512000266	1	54.6	69	3.7674	Degraded slightly	GBS-seq	Level A	
74	1HL 2A	HKYD15122042_A	1HL 2	T8521512000267	1	133	68	9.044	Degraded slightly	GBS-seq	Level A	
75	1HL 3A	HKYD15122043_A	1HL 3	T8521512000268	1	264	70	18.48	Degraded slightly	GBS-seq	Level A	
76	1HL 4A	HKYD15122044_A	1HL 4	T8521512000269	1	190	72	13.68	Degraded slightly	GBS-seq	Level A	
77	1HL 5A	HKYD15122045_A	1HL 5	T8521512000270	1	54.6	63	3.4398	Degraded slightly	GBS-seq	Level A	
78	1HL 6A	HKYD15122046_A	1HL 6	T8521512000271	1	26.4	75	1.98	Degraded slightly	GBS-seq	Level A	
79	1HL 7A	HKYD15122047_A	1HL 7	T8521512000272	1	31.2	79	2.4648	Degraded slightly	GBS-seq	Level A	
80	1HL 8A	HKYD15122048_A	1HL 8	T8521512000273	1	66	80	5.28	Degraded slightly	GBS-seq	Level A	
81	1HL 9A	HKYD15122049_A	1HL 9	T8521512000274	1	35.2	73	2.5696	Degraded slightly	GBS-seq	Level A	
82	1HL 10A	HKYD15122050_A	1HL 10	T8521512000275	1	41.6	73	3.0368	Degraded slightly	GBS-seq	Level A	
83	1HL 11A	HKYD15122051_A	1HL 11	T8521512000276	1	43.8	73	3.1974	Degraded slightly	GBS-seq	Level A	
84	1HL 12A	HKYD15122052_A	1HL 12	T8521512000277	1	408	84	34.272	Degraded slightly	GBS-seq	Level A	
85	1HL 13A	HKYD15122053_A	1HL 13	T8521512000278	1	113	71	8.023	Degraded slightly	GBS-seq	Level A	
86	1HL 14A	HKYD15122054_A	1HL 14	T8521512000279	1	123	78	9.594	Degraded slightly	GBS-seq	Level A	
87	1HL 15A	HKYD15122055_A	1HL 15	T8521512000280	1	33.2	74	2.4568	Degraded slightly	GBS-seq	Level A	
88	1HL 16A	HKYD15122056_A	1HL 16	T8521512000281	1	70.8	74	5.2392	Degraded slightly	GBS-seq	Level A	
89	1HL 17A	HKYD15122057_A	1HL 17	T8521512000282	1	88.4	65	5.746	Degraded slightly	GBS-seq	Level A	
90	1HL 18A	HKYD15122058_A	1HL 18	T8521512000283	1	99.6	46	4.5816	Degraded Moderate	GBS-seq	Level C	The sample is degraded partly, proposed to resend the sample.
91	1HL 19A	HKYD15122059_A	1HL 19	T8521512000284	1	12.5	67	0.8375	Degraded slightly	GBS-seq	Level A	
92	1HL 20A	HKYD15122060_A	1HL 20	T8521512000285	1	119	67	7.973	Degraded slightly	GBS-seq	Level A	

93	1HL 21A	HKYD15122061_A	1HL 21	T8521512000286	1	61.4	76	4.6664	Degraded slightly	GBS-seq	Level A	
94	1HL 22A	HKYD15122062_A	1HL 22	T8521512000287	1	123	81	9.963	Degraded slightly	GBS-seq	Level A	
95	1HL 23A	HKYD15122063_A	1HL 23	T8521512000288	1	173	87	15.051	Degraded slightly	GBS-seq	Level A	
96	1HL 24A	HKYD15122064_A	1HL 24	T8521512000289	1	128	75	9.6	Degraded slightly	GBS-seq	Level A	
97	1HL 25A	HKYD15122065_A	1HL 25	T8521512000290	1	124	92	11.408	Degraded slightly	GBS-seq	Level A	
98	1HL 26A	HKYD15122066_A	1HL 26	T8521512000291	1	70	77	5.39	Degraded slightly	GBS-seq	Level A	
99	1HL 27A	HKYD15122067_A	1HL 27	T8521512000292	1	27.4	72	1.9728	Degraded slightly	GBS-seq	Level A	
100	1HL 28A	HKYD15122068_A	1HL 28	T8521512000293	1	151	78	11.778	Degraded slightly	GBS-seq	Level A	
101	1HL 29A	HKYD15122069_A	1HL 29	T8521512000294	1	73.6	78	5.7408	Degraded slightly	GBS-seq	Level A	
102	1HL 30A	HKYD15122070_A	1HL 30	T8521512000295	1	128	44	5.632	Degraded Moderate	GBS-seq	Level C	The sample is degraded partly,proposed to resend the sample.
103	1HL 31A	HKYD15122071_A	1HL 31	T8521512000296	1	31.8	44	1.3992	Degraded slightly	GBS-seq	Level A	
104	1HL 32A	HKYD15122072_A	1HL 32	T8521512000297	1	140	47	6.58	Degraded Moderate	GBS-seq	Level C	The sample is degraded partly,proposed to resend the sample.
105	1HL 33A	HKYD15122073_A	1HL 33	T8521512000298	1	102	77	7.854	Degraded slightly	GBS-seq	Level A	
106	1HL 34A	HKYD15122074_A	1HL 34	T8521512000299	1	53	77	4.081	Degraded slightly	GBS-seq	Level A	
107	1HL 35A	HKYD15122075_A	1HL 35	T8521512000300	1	41.4	40	1.656	Degraded slightly	GBS-seq	Level A	
108	1HL 36A	HKYD15122076_A	1HL 36	T8521512000301	1	54.2	72	3.9024	Degraded slightly	GBS-seq	Level A	

Note*:

1. The test result based on the 《DNA sequencing sample quality standards》 explains whether the testing sample meets the requirement of library construction.
a) Level A means the sample is qualified, and the amount of sample is sufficient for two or more library constructions.
b) Level B means the sample is qualified, but the amount of sample only satisfies one time library construction.
c) 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
d) Level D means the sample does not meet the requirements of library construction and sequencing. BGI does not suggest in using this sample.
2. According to BGI's data, the one-time successful rate of library construction is more than 95% for samples of level A and level B.
3. According to BGI's data,the risks of library construction for sample of level C or level D are listed below:
a) 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.
b) Degradation of sample: It may cause high duplication rate of library and insert fragment will be abnormal."
c) Pollution by Protein or Insoluble Impurity: It may affect the fragmentation effect, leads to insert size unstable, influence the SNP analysis
d) RNA contamination: It possibly effects the DNA concentration quantitative accuracy.
4. 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: Sample #9 and #29 are selected for restricted enzyme

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, fully mixed and centrifuged, 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
1NF 1A	HKYD15121969_A	Qubit	DNA BR	1	1	102	102	
1NF 2A	HKYD15121970_A	Qubit	DNA BR	1	1	80.6	80.6	
1NF 3A	HKYD15121971_A	Qubit	DNA BR	1	1	61.4	61.4	
1NF 4A	HKYD15121972_A	Qubit	DNA BR	1	1	69	69	
1NF 5A	HKYD15121973_A	Qubit	DNA BR	1	1	56.2	56.2	
1NF 6A	HKYD15121974_A	Qubit	DNA BR	1	1	34.8	34.8	
1NF 7A	HKYD15121975_A	Qubit	DNA BR	1	1	56.2	56.2	
1NF 8A	HKYD15121976_A	Qubit	DNA BR	1	1	56	56	
1NF 9A	HKYD15121977_A	Qubit	DNA BR	1	1	86.6	86.6	
1NF 10A	HKYD15121978_A	Qubit	DNA BR	1	1	28.2	28.2	
1NF 11A	HKYD15121979_A	Qubit	DNA BR	1	1	48.6	48.6	
1NF 12A	HKYD15121980_A	Qubit	DNA BR	1	1	49.4	49.4	
1NF 13A	HKYD15121981_A	Qubit	DNA BR	1	1	12.8	12.8	
1NF 14A	HKYD15121982_A	Qubit	DNA BR	1	1	39.2	39.2	
1NF 15A	HKYD15121983_A	Qubit	DNA BR	1	1	29.2	29.2	
1NF 16A	HKYD15121984_A	Qubit	DNA BR	1	1	26	26	
1NF 17A	HKYD15121985_A	Qubit	DNA BR	1	1	50.2	50.2	
1NF 18A	HKYD15121986_A	Qubit	DNA BR	1	1	15	15	
1NF 19A	HKYD15121987_A	Qubit	DNA BR	1	1	38.4	38.4	
1NF 20A	HKYD15121988_A	Qubit	DNA BR	1	1	39.2	39.2	
1NF 21A	HKYD15121989_A	Qubit	DNA BR	1	1	42.2	42.2	
1NF 22A	HKYD15121990_A	Qubit	DNA BR	1	1	49.6	49.6	
1NF 23A	HKYD15121991_A	Qubit	DNA BR	1	1	45.6	45.6	
1NF 24A	HKYD15121992_A	Qubit	DNA BR	1	1	17.6	17.6	
1NF 25A	HKYD15121993_A	Qubit	DNA BR	1	1	15.4	15.4	
1NF 26A	HKYD15121994_A	Qubit	DNA BR	1	1	74.8	74.8	
1NF 27A	HKYD15121995_A	Qubit	DNA BR	1	1	55	55	
1NF 28A	HKYD15121996_A	Qubit	DNA BR	1	1	35	35	
1NF 29A	HKYD15121997_A	Qubit	DNA BR	1	1	98.6	98.6	

1NF 30A	HKYD15121998_A	Qubit	DNA BR	1	1	115	115	
1NF 31A	HKYD15121999_A	Qubit	DNA BR	1	1	114	114	
1NF 32A	HKYD15122000_A	Qubit	DNA BR	1	1	49.2	49.2	
1NF 33A	HKYD15122001_A	Qubit	DNA BR	1	1	79.6	79.6	
1NF 34A	HKYD15122002_A	Qubit	DNA BR	1	1	39.6	39.6	
1NF 35A	HKYD15122003_A	Qubit	DNA BR	1	1	21.4	21.4	
1NF 36A	HKYD15122004_A	Qubit	DNA BR	1	1	77.8	77.8	
1SN 1A	HKYD15122005_A	Qubit	DNA BR	1	1	59.8	59.8	
1SN 2A	HKYD15122006_A	Qubit	DNA BR	1	1	46.8	46.8	
1SN 3A	HKYD15122007_A	Qubit	DNA BR	1	1	15.7	15.7	
1SN 4A	HKYD15122008_A	Qubit	DNA BR	1	1	38	38	
1SN 5A	HKYD15122009_A	Qubit	DNA BR	1	1	17.5	17.5	
1SN 6A	HKYD15122010_A	Qubit	DNA BR	1	1	80.6	80.6	
1SN 7A	HKYD15122011_A	Qubit	DNA BR	1	1	87	87	
1SN 8A	HKYD15122012_A	Qubit	DNA BR	1	1	108	108	
1SN 9A	HKYD15122013_A	Qubit	DNA BR	1	1	15.8	15.8	
1SN 10A	HKYD15122014_A	Qubit	DNA BR	1	1	69.4	69.4	
1SN 11A	HKYD15122015_A	Qubit	DNA BR	1	1	53.6	53.6	
1SN 12A	HKYD15122016_A	Qubit	DNA BR	1	1	30.6	30.6	
1SN 13A	HKYD15122017_A	Qubit	DNA BR	1	1	96	96	
1SN 14A	HKYD15122018_A	Qubit	DNA BR	1	1	33.8	33.8	
1SN 15A	HKYD15122019_A	Qubit	DNA BR	1	1	48.6	48.6	
1SN 16A	HKYD15122020_A	Qubit	DNA BR	1	1	66	66	
1SN 17A	HKYD15122021_A	Qubit	DNA BR	1	1	65.4	65.4	
1SN 18A	HKYD15122022_A	Qubit	DNA BR	1	1	79.4	79.4	
1SN 19A	HKYD15122023_A	Qubit	DNA BR	1	1	22.2	22.2	
1SN 20A	HKYD15122024_A	Qubit	DNA BR	1	1	42.8	42.8	
1SN 21A	HKYD15122025_A	Qubit	DNA BR	1	1	36.6	36.6	
1SN 22A	HKYD15122026_A	Qubit	DNA BR	1	1	80.8	80.8	
1SN 23A	HKYD15122027_A	Qubit	DNA BR	1	1	35.6	35.6	
1SN 24A	HKYD15122028_A	Qubit	DNA BR	1	1	66.6	66.6	
1SN 25A	HKYD15122029_A	Qubit	DNA BR	1	1	111	111	
1SN 26A	HKYD15122030_A	Qubit	DNA BR	1	1	47.2	47.2	
1SN 27A	HKYD15122031_A	Qubit	DNA BR	1	1	83	83	
1SN 28A	HKYD15122032_A	Qubit	DNA BR	1	1	57.8	57.8	
1SN 29A	HKYD15122033_A	Qubit	DNA BR	1	1	5.9	5.9	
1SN 30A	HKYD15122034_A	Qubit	DNA BR	1	1	75.4	75.4	

1SN 31A	HKYD15122035_A	Qubit	DNA BR	1	1	76	76	
1SN 32A	HKYD15122036_A	Qubit	DNA BR	1	1	57.2	57.2	
1SN 33A	HKYD15122037_A	Qubit	DNA BR	1	1	121	121	
1SN 34A	HKYD15122038_A	Qubit	DNA BR	1	1	88	88	
1SN 35A	HKYD15122039_A	Qubit	DNA BR	1	1	36	36	
1SN 36A	HKYD15122040_A	Qubit	DNA BR	1	1	37.4	37.4	
1HL 1A	HKYD15122041_A	Qubit	DNA BR	1	1	54.6	54.6	
1HL 2A	HKYD15122042_A	Qubit	DNA BR	1	1	133	133	
1HL 3A	HKYD15122043_A	Qubit	DNA BR	1	1	264	264	
1HL 4A	HKYD15122044_A	Qubit	DNA BR	1	1	190	190	
1HL 5A	HKYD15122045_A	Qubit	DNA BR	1	1	54.6	54.6	
1HL 6A	HKYD15122046_A	Qubit	DNA BR	1	1	26.4	26.4	
1HL 7A	HKYD15122047_A	Qubit	DNA BR	1	1	31.2	31.2	
1HL 8A	HKYD15122048_A	Qubit	DNA BR	1	1	66	66	
1HL 9A	HKYD15122049_A	Qubit	DNA BR	1	1	35.2	35.2	
1HL 10A	HKYD15122050_A	Qubit	DNA BR	1	1	41.6	41.6	
1HL 11A	HKYD15122051_A	Qubit	DNA BR	1	1	43.8	43.8	
1HL 12A	HKYD15122052_A	Qubit	DNA BR	1	1	408	408	
1HL 13A	HKYD15122053_A	Qubit	DNA BR	1	1	113	113	
1HL 14A	HKYD15122054_A	Qubit	DNA BR	1	1	123	123	
1HL 15A	HKYD15122055_A	Qubit	DNA BR	1	1	33.2	33.2	
1HL 16A	HKYD15122056_A	Qubit	DNA BR	1	1	70.8	70.8	
1HL 17A	HKYD15122057_A	Qubit	DNA BR	1	1	88.4	88.4	
1HL 18A	HKYD15122058_A	Qubit	DNA BR	1	1	99.6	99.6	
1HL 19A	HKYD15122059_A	Qubit	DNA BR	1	1	12.5	12.5	
1HL 20A	HKYD15122060_A	Qubit	DNA BR	1	1	119	119	
1HL 21A	HKYD15122061_A	Qubit	DNA BR	1	1	61.4	61.4	
1HL 22A	HKYD15122062_A	Qubit	DNA BR	1	1	123	123	
1HL 23A	HKYD15122063_A	Qubit	DNA BR	1	1	173	173	
1HL 24A	HKYD15122064_A	Qubit	DNA BR	1	1	128	128	
1HL 25A	HKYD15122065_A	Qubit	DNA BR	1	1	124	124	
1HL 26A	HKYD15122066_A	Qubit	DNA BR	1	1	70	70	
1HL 27A	HKYD15122067_A	Qubit	DNA BR	1	1	27.4	27.4	
1HL 28A	HKYD15122068_A	Qubit	DNA BR	1	1	151	151	
1HL 29A	HKYD15122069_A	Qubit	DNA BR	1	1	73.6	73.6	
1HL 30A	HKYD15122070_A	Qubit	DNA BR	1	1	128	128	
1HL 31A	HKYD15122071_A	Qubit	DNA BR	1	1	31.8	31.8	
			DNA					

1HL 32A	HKYD15122072_A	Qubit	BR	1	1	140	140	
1HL 33A	HKYD15122073_A	Qubit	DNA BR	1	1	102	102	
1HL 34A	HKYD15122074_A	Qubit	DNA BR	1	1	53	53	
1HL 35A	HKYD15122075_A	Qubit	DNA BR	1	1	41.4	41.4	
1HL 36A	HKYD15122076_A	Qubit	DNA BR	1	1	54.2	54.2	

Appendix 2: Test results of agarose gel electrophoresis

1. Pre-treatment

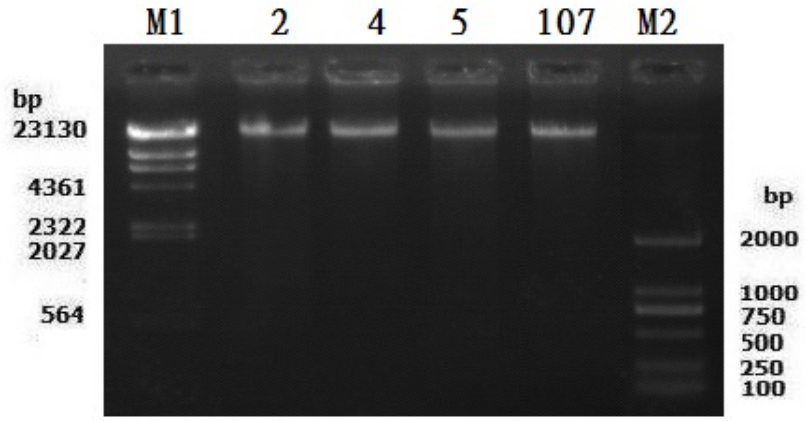
After the sample melted the ice, fully mixed and centrifuged, take appropriate samples for testing.

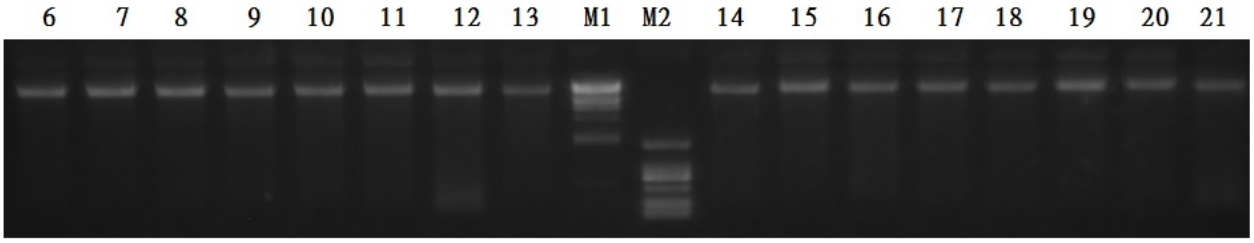
2. Test Parameter

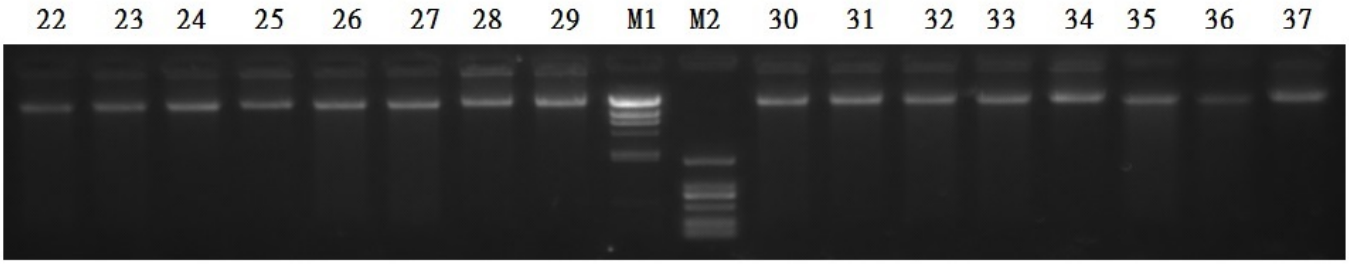
Concentration of Agarose Gel: 1 %; Voltage: 150 V; Electrophoresis Time: 40 min

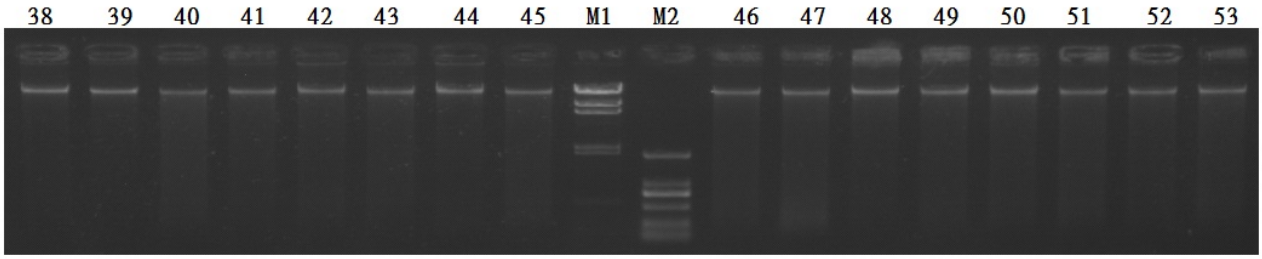
3. Test Result

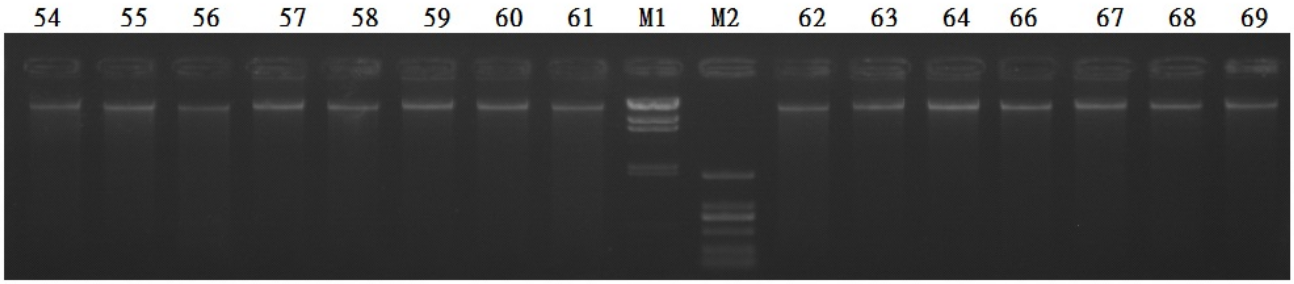
(1)Electrophoretogram:

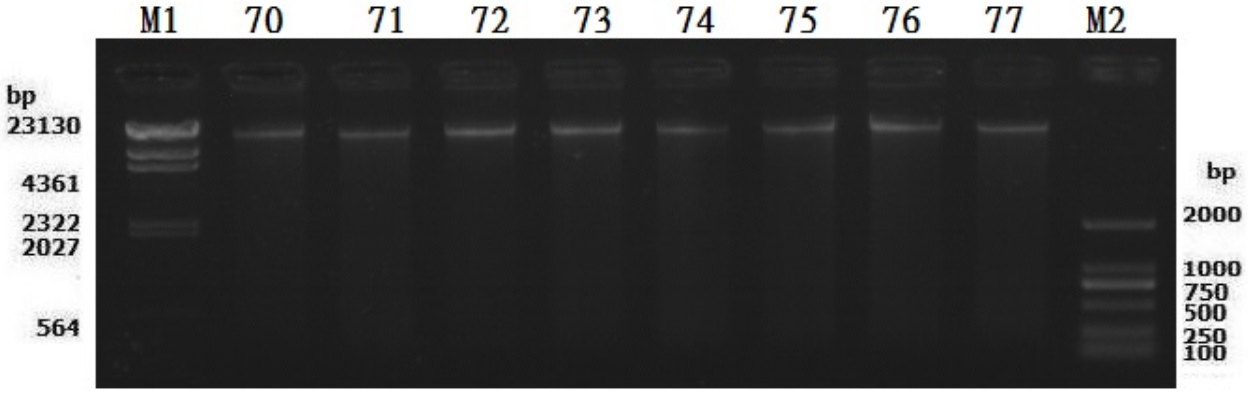


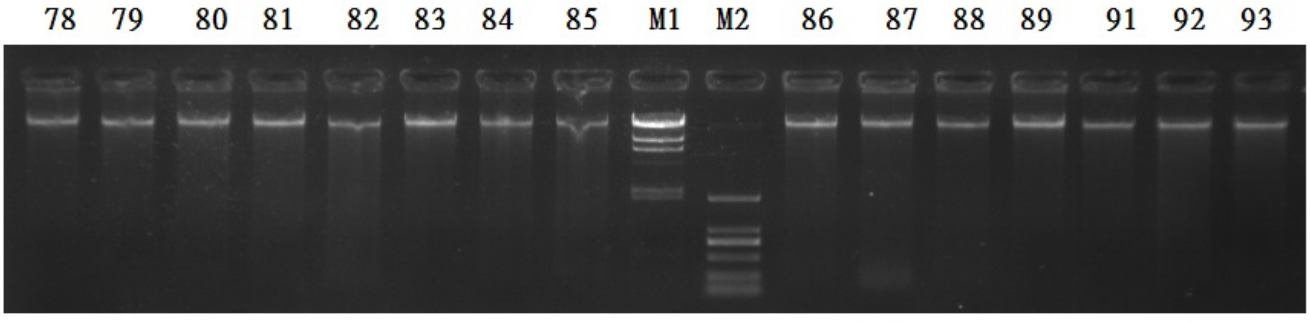


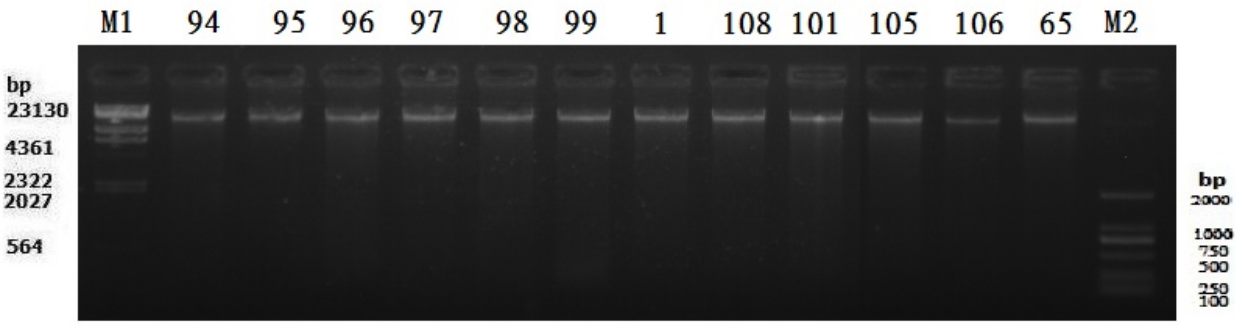


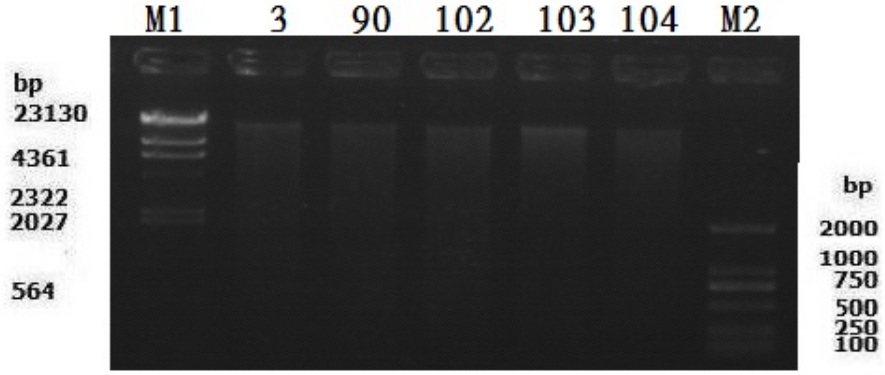

38 39 40 41 42 43 44 45 M1 M2 46 47 48 49 50 51 52 53

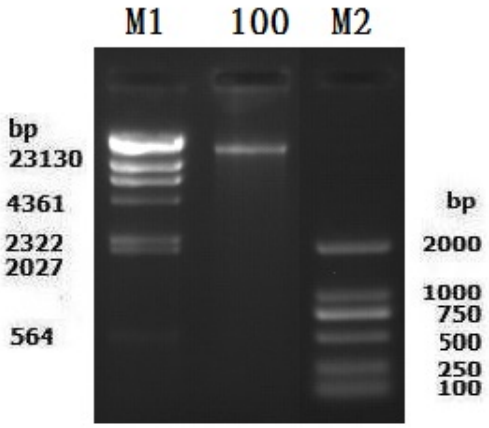

54 55 56 57 58 59 60 61 M1 M2 62 63 64 66 67 68 69

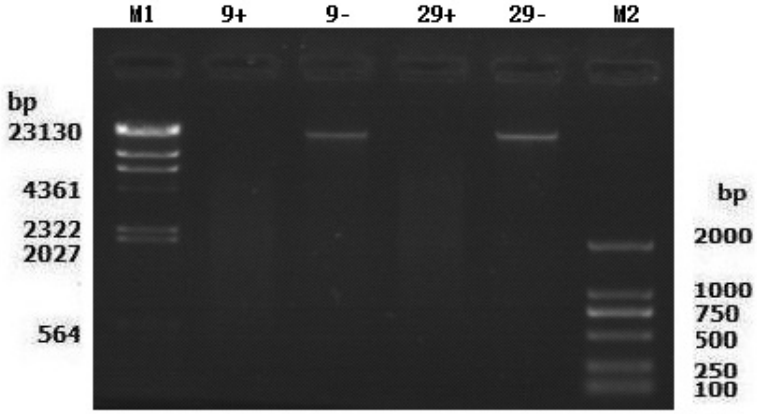

M1 70 71 72 73 74 75 76 77 M2
bp
23130
4361
2322
2027
564
bp
2000
1000
750
500
250
100


78 79 80 81 82 83 84 85 M1 M2 86 87 88 89 91 92 93


M1 94 95 96 97 98 99 1 108 101 105 106 65 M2
bp
23130
4361
2322
2027
564
bp
2000
1000
750
500
250
100







Lane No.	Sample Name	Dilution Ratio(×)	Test Volume(μL)	Sample Integrity	Remark
M1	λ-Hind III digest(Takara)	1	3		
1	1NF 1A	1	0.98	Degraded slightly	
2	1NF 2A	1	1.24	Degraded slightly	
3	1NF 3A	1	1.63	Degraded Moderate	
4	1NF 4A	1	1.45	Degraded slightly	
5	1NF 5A	1	1.78	Degraded slightly	
6	1NF 6A	1	2.87	Degraded slightly	
7	1NF 7A	1	1.78	Degraded slightly	
8	1NF 8A	1	1.79	Degraded slightly	
9	1NF 9A	1	1.15	Degraded slightly	
10	1NF 10A	1	3.55	Degraded slightly	
11	1NF 11A	1	2.06	Degraded slightly	
12	1NF 12A	1	2.02	Degraded slightly	

13	1NF 13A	1	5.00	Degraded slightly	
14	1NF 14A	1	2.55	Degraded slightly	
15	1NF 15A	1	3.42	Degraded slightly	
16	1NF 16A	1	3.85	Degraded slightly	
17	1NF 17A	1	1.99	Degraded slightly	
18	1NF 18A	1	5.00	Degraded slightly	
19	1NF 19A	1	2.60	Degraded slightly	
20	1NF 20A	1	2.55	Degraded slightly	
21	1NF 21A	1	2.37	Degraded slightly	
22	1NF 22A	1	2.02	Degraded slightly	
23	1NF 23A	1	2.19	Degraded slightly	
24	1NF 24A	1	5.00	Degraded slightly	
25	1NF 25A	1	5.00	Degraded slightly	
26	1NF 26A	1	1.34	Degraded slightly	
27	1NF 27A	1	1.82	Degraded slightly	
28	1NF 28A	1	2.86	Degraded slightly	
29	1NF 29A	1	1.01	Degraded slightly	
30	1NF 30A	1	0.87	Degraded slightly	
31	1NF 31A	1	0.88	Degraded slightly	
32	1NF 32A	1	2.03	Degraded slightly	
33	1NF 33A	1	1.26	Degraded slightly	
34	1NF 34A	1	2.53	Degraded slightly	
35	1NF 35A	1	4.67	Degraded slightly	
36	1NF 36A	1	1.29	Degraded slightly	
37	1SN 1A	1	1.67	Degraded slightly	
38	1SN 2A	1	2.14	Degraded slightly	
39	1SN 3A	1	5.00	Degraded slightly	
40	1SN 4A	1	2.63	Degraded slightly	
41	1SN 5A	1	5.00	Degraded slightly	
42	1SN 6A	1	1.24	Degraded slightly	
43	1SN 7A	1	1.15	Degraded slightly	
44	1SN 8A	1	0.93	Degraded slightly	
45	1SN 9A	1	5.00	Degraded slightly	
46	1SN 10A	1	1.44	Degraded slightly	
47	1SN 11A	1	1.87	Degraded slightly	
48	1SN 12A	1	3.27	Degraded slightly	
49	1SN 13A	1	1.04	Degraded slightly	
50	1SN 14A	1	2.96	Degraded slightly	
51	1SN 15A	1	2.06	Degraded slightly	
52	1SN 16A	1	1.52	Degraded slightly	
53	1SN 17A	1	1.53	Degraded slightly	
54	1SN 18A	1	1.26	Degraded slightly	
55	1SN 19A	1	4.50	Degraded slightly	
56	1SN 20A	1	2.34	Degraded slightly	
57	1SN 21A	1	2.73	Degraded slightly	
58	1SN 22A	1	1.24	Degraded slightly	
59	1SN 23A	1	2.81	Degraded slightly	
60	1SN 24A	1	1.50	Degraded slightly	
61	1SN 25A	1	0.90	Degraded slightly	
62	1SN 26A	1	2.12	Degraded slightly	
63	1SN 27A	1	1.20	Degraded slightly	
64	1SN 28A	1	1.73	Degraded slightly	
65	1SN 29A	1	5.00	Degraded slightly	
66	1SN 30A	1	1.33	Degraded slightly	
67	1SN 31A	1	1.32	Degraded slightly	
68	1SN 32A	1	1.75	Degraded slightly	
69	1SN 33A	1	0.83	Degraded slightly	
70	1SN 34A	1	1.14	Degraded slightly	
71	1SN 35A	1	2.78	Degraded slightly	
72	1SN 36A	1	2.67	Degraded slightly	
73	1HL 1A	1	1.83	Degraded slightly	
74	1HL 2A	1	0.75	Degraded slightly	
75	1HL 3A	1	0.38	Degraded slightly	
76	1HL 4A	1	0.53	Degraded slightly	
77	1HL 5A	1	1.83	Degraded slightly	
78	1HL 6A	1	3.79	Degraded slightly	
79	1HL 7A	1	3.21	Degraded slightly	
80	1HL 8A	1	1.52	Degraded slightly	

81	1HL 9A	1	2.84	Degraded slightly	
82	1HL 10A	1	2.40	Degraded slightly	
83	1HL 11A	1	2.28	Degraded slightly	
84	1HL 12A	10	2.45	Degraded slightly	
85	1HL 13A	1	0.88	Degraded slightly	
86	1HL 14A	1	0.81	Degraded slightly	
87	1HL 15A	1	3.01	Degraded slightly	
88	1HL 16A	1	1.41	Degraded slightly	
89	1HL 17A	1	1.13	Degraded slightly	
90	1HL 18A	1	1.00	Degraded Moderate	
91	1HL 19A	1	5.00	Degraded slightly	
92	1HL 20A	1	0.84	Degraded slightly	
93	1HL 21A	1	1.63	Degraded slightly	
94	1HL 22A	1	0.81	Degraded slightly	
95	1HL 23A	1	0.58	Degraded slightly	
96	1HL 24A	1	0.78	Degraded slightly	
97	1HL 25A	1	0.81	Degraded slightly	
98	1HL 26A	1	1.43	Degraded slightly	
99	1HL 27A	1	3.65	Degraded slightly	
100	1HL 28A	1	0.66	Degraded slightly	
101	1HL 29A	1	1.36	Degraded slightly	
102	1HL 30A	1	0.78	Degraded Moderate	
103	1HL 31A	1	3.14	Degraded slightly	
104	1HL 32A	1	0.71	Degraded Moderate	
105	1HL 33A	1	0.98	Degraded slightly	
106	1HL 34A	1	1.89	Degraded slightly	
107	1HL 35A	1	2.42	Degraded slightly	
108	1HL 36A	1	1.85	Degraded slightly	
M2	D2000 (Tiangen)	1	6		

Appendix 3: Original information of sample

Sample Type:						
Sample status:						
Further Information:						
Sample Name	Species	No. of Tubes	Total Quantity	Time of collection	Do multiple vials contain same species	Remark
1NF 31		1	0			
1NF 32		1	0			
1NF 33		1	0			
1NF 34		1	0			
1NF 35		1	0			
1NF 36		1	0			
1SN 1		1	0			
1SN 2		1	0			
1SN 3		1	0			
1SN 4		1	0			
1SN 5		1	0			
1SN 6		1	0			
1SN 7		1	0			
1SN 8		1	0			
1SN 9		1	0			
1SN 10		1	0			
1SN 11		1	0			
1SN 12		1	0			
1SN 13		1	0			

1SN 14		1	0			
1SN 15		1	0			
1SN 16		1	0			
1SN 17		1	0			
1SN 18		1	0			
1SN 19		1	0			
1SN 20		1	0			
1SN 21		1	0			
1SN 22		1	0			
1SN 23		1	0			
1NF 29		1	0			
1NF 30		1	0			
1SN 24		1	0			
1SN 25		1	0			
1SN 26		1	0			
1SN 27		1	0			
1SN 28		1	0			
1SN 29		1	0			
1SN 30		1	0			
1SN 31		1	0			
1SN 32		1	0			
1SN 33		1	0			
1SN 34		1	0			
1SN 35		1	0			
1SN 36		1	0			
1HL 1		1	0			
1HL 2		1	0			
1HL 3		1	0			
1HL 4		1	0			
1HL 5		1	0			
1HL 6		1	0			
1HL 7		1	0			
1HL 8		1	0			
1HL 9		1	0			
1HL 10		1	0			
1HL 11		1	0			
1HL 12		1	0			
1HL 13		1	0			
1HL 14		1	0			
1HL 15		1	0			
1HL 16		1	0			
1HL 17		1	0			
1HL 18		1	0			
1HL 19		1	0			
1HL 20		1	0			
1HL 21		1	0			
1HL 32		1	0			
1HL 33		1	0			

1HL 22		1	0			
1HL 23		1	0			
1HL 24		1	0			
1HL 25		1	0			
1HL 26		1	0			
1HL 27		1	0			
1HL 28		1	0			
1HL 29		1	0			
1HL 30		1	0			
1HL 31		1	0			
1NF 1		1	0			
1NF 2		1	0			
1NF 3		1	0			
1NF 4		1	0			
1NF 5		1	0			
1NF 6		1	0			
1NF 7		1	0			
1NF 8		1	0			
1NF 9		1	0			
1HL 34		1	0			
1HL 35		1	0			
1HL 36		1	0			
1NF 10		1	0			
1NF 11		1	0			
1NF 12		1	0			
1NF 13		1	0			
1NF 14		1	0			
1NF 15		1	0			
1NF 16		1	0			
1NF 17		1	0			
1NF 18		1	0			
1NF 19		1	0			
1NF 20		1	0			
1NF 21		1	0			
1NF 22		1	0			
1NF 23		1	0			
1NF 24		1	0			
1NF 25		1	0			
1NF 26		1	0			
1NF 27		1	0			
1NF 28		1	0			

End of Report