

## DNA Paternity Test

### 1 . Sample Submission and Delivery

- Samples should be delivered and submitted to PROVIDER with the requirements and shipment address detailed in Appednix A.
- Every sample submitted shall be accompanied with the " Request Form" , " Informed Consent Form" and " Infection Control Agreement" ( due to current pandemic) in the format provided by PROVIDER.
- Every sample should be labeled with client' s name.
- After the samples being picked up by Logistic Company, DISTRIBUTOR shall send an email with details of tracking no . , client' s name and attached document . ( i. e. Request Form)

### 2 . Sample Arrival

- When the samples are received by PROVIDER, Lab personnel shall investigate the quality and quantity of the samples . A received email shall be sent by PROVIDER.
- If the samples are qualified, PROVIDER shall send an email to confirm the samples are received with the details of client' s name and turnaround time ( " TAT" ) ( 7 - 10 working days)
- If the samples are not qualified ( e.g. insufficient quality and quantity of the sample) , PROVIDER shall send an email to request a recollection of the sample.

### 3 . Report

- PROVIDER shall prepare and deliver the final soft copy report to DISTRIBUTOR via Email within the agreed turnaround time.
- DISTRIBUTOR acknowledges that the reports provided by PROVIDER are sole for reference and are not for legal documents.

### 4 . Inconclusive Result - Recollection of sample

- After the data analysis, there are several reasons that can cause the result inconclusive ( e . g . sample contaminated) . Therefore, DNA test for Africa shall request a recollection of sample via email with client' s name, reason of recollection .

### 5 . Inconculstive Result - Resequencing

- For resequencing case, TAT is extended to 15 working days . PROVIDER shall give an email notice on 8<sup>th</sup> working day or earlier if resequencing needed .
- After the resequencing, if the result still inconclusive, recollection of the sample is needed . PROVIDER shall request a recollection of sample via email .

### 6 . Termination of the case

- If the clients wish to terminate the case before the extraction is started ( i. e. , the samples are not qualified once it arrived at our lab, and recollection is needed) , The case shall be free of charge .
- If the clients wish to terminate the case after the extraction and analysis ( i. e. , the result is inconclusive and recollection is needed) , The case shall be charged 1 / 3 of the original price .

## SAMPLE REQUIREMENT

**Blood:** 5 mL capillary blood, EDTA anticoagulation

Requirements of blood sample transportation

Shipment together with ice bag or dry ice is recommended . Shipment at room temperature is allowed only if the delivery time is within 3 days.

**Bloodstain card:** air-dry, 2×8 mm

**Fingernail:** at least 5 complete pieces or fragmented pieces from 5 fingernails

**Hair with follicle:** at least 10 hairs with follicle

**Buccal Swab:** at least 5 swab cotton

Before sampling, rinse mouth with clean water, wipe up and down with the cotton swab with the force of brushing teeth, rotate the cotton swab at the same time, wipe 15-20 times, and dry the collected

swab cotton in a clean shade for 2-5 hours. Store the collected swab cotton by envelope.

<b>DNA Paternity Test</b>			
<b>Genetics Test Result Note</b>			
Report No.	LHK*****	Samples Received Date	**/**/****
Sample Source	*****		
<b>Client A: A</b>			
Gender	M	ID./ Passport No.	*****
Client No		Date of Birth	**/**/****
Sample Type	*****	Sampling Date	**/**/****
<b>Client B: BB</b>			
Gender	F	ID./ Passport No.	*****
Client No		Date of Birth	**/**/****
Sample Type	*****	Sampling Date	**/**/****

The DNA Paternity Test is performed by using the following methods:

- 1 . Extraction of DNA
- 2 . DNA amplification using PCR
- 3 . Examine the STR with Genetic Analyzer

<b>Result</b>					
STR	<b>Client A: AA</b>		<b>Client B: BB</b>		Paternity Index [A&B]
Yindel	2	2	-	-	-
AMEL	X	Y	X	X	-
D3S1358	16	16	16	16	3.041363
D13S317	8	11	8	11	1.938782
D7S820	8	8	8	8	7.007709
D16S539	9	12	9	12	2.056913
D8S1179	13	15	12	15	1.436782
Penta D	12	13	11	13	2.067825
D19S433	12	12.2	12	14	6.142506
D5S818	11	13	11	13	2.541136
D21S11	30	32	31	32	8.445946
TPOX	11	11	8	11	1.644196
D1S1656	12	13	12	14	6.265664
D6S1043	12	18	12	17	1.823487
D2S441	10	14	10	10	2.020202
D12S391	21	24	18	21	2.149613
D2S1338	18	20	18	19	2.208481
vWA	14	18	17	18	1.283368
Penta E	12	20	14	20	5.592841
TH01	7	9	7	7	1.813565
D18S51	13	13	13	16	2.718869
CSF1 PO	11	11	11	11	4.128819
FGA	20	22	22	22	2.876870
Combined Paternity Index ( CPI)					2.53×10 <sup>9</sup>

Interpretation
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The alleged father, AA, is not excluded as the biological father of the tested child, BB. Based on the method of Mendelian Inconsistency, the  $2.53 \times 10^{-9}$  and the probability of AA being the biological father of BB is  $> 99.999999\%$ . According to our analysis and the biostatistical evaluation of the result, they indicate that AA is the biological father of BB since the genetic markers show that father provides sufficient frequency of allele to child.

Conclusion

AA is the biological father of BB.

For and behalf of DNA test for Africa

**Report Date: \*\*/\*\*/\*\*\*\***

## Report Notes

### Result

The accuracy of this genetic DNA test result is limited by sample storage period, mean of handling and condition of transportation.

The test result may also be affected by individual variation and possible contamination during sample collection.

Due to the limitation of the latest molecular technology, it is possible that the test result may result in false positive, false negative and inconclusive.

### STR

Short Tandem Repeat

## Disclaimer

Client has agreed and released, indemnify and hold harmless to all of DNA test for Africa' s officers, employees, advisors, and agents against any and/ or all direct, incidental, special, consequential, indirect or punitive claims, liabilities and/ or damages relating to or arising out of in any way to test service.

## DNA Paternity Test Request Form

<b>Agent</b>		<b>Contact No.</b>	
<b>Clinic</b>		<b>Physician</b>	
<b>Address</b>			

1 . Relationship of Patient can be: Father, Mother, Son, Daughter

2 . Type of sample can be: A. Blood Sample, B. Bloodstain, C. Buccal Swab, D. Hair with Follicle, E. Nails

<b>Client Information</b>			
* Relationship of Client			
* Name		ID. / Passport No.	
		DOB ( DD/ MM/ YYYY)	
* Type of Sample	( A /B /C /D /E_____ )	* Sampling Date	
* Did you received a blood transfusion or stem cell transplantation? <input type="checkbox"/> Yes Date: _____ <input type="checkbox"/> No			
<b>Client Information</b>			
* Relationship of Client			
* Name		ID. / Passport No.	
		DOB ( DD/ MM/ YYYY)	
* Type of Sample	( A /B /C /D /E_____ )	* Sampling Date	
* Did you received a blood transfusion or stem cell transplantation? <input type="checkbox"/> Yes Date: _____ <input type="checkbox"/> No			
<b>Client Information</b>			
* Relationship of Client			
* Name		ID. / Passport No.	
		DOB ( DD/ MM/ YYYY)	
* Type of Sample	( A /B /C /D /E_____ )	* Sampling Date	
* Did you received a blood transfusion or stem cell transplantation? <input type="checkbox"/> Yes Date: _____ <input type="checkbox"/> No			

**\* Read and sign the “Notice to Client” and “Informed Consent” on second page**

**Notice to Client**

- 1 . Types of sample can be blood sample, bloodstain, buccal swab, hair with follicle, or nails.
- 2 . Relationship of patient can be father, mother, son, or daughter.
- 3 . The result of this DNA test is affected by method of sample storage, process and transport.
- 4 . The result can be affected by mutation of individual DNA and contamination during sample collection.
- 5 . Due the limitation of current technique, result can be false positive, false negative or inconclusive for the test.
- 6 . The result may be available in 7- 10 working days since received date.
- 7 . If the process of test is affected by unexpected cause, DNA test for Africa may ask for a re-collecting sample and extend the date of process.

**Informed Consent**

- 1 . I authorize DNA test for Africa to use my sample for the purpose of paternity test
- 2 . I agree DNA test for Africa to use the data of my test for research purpose.
- 3 . I provided correct and reliable personal detail for the test.
- 4 . I am willing to hold all the risk of the test.
- 5 . I understand content of the informed consent. I have had the opportunity to ask questions and discuss the capabilities, limitations, and possible risks of the test( s) with my healthcare provide or someone who has designated.
- 6 . I agree and shall release, indemnify and hold harmless all of DNA test for Africa' s officers, employees, advisors, and agents against any and all direct, incidental, special, consequential, indirect or punitive claims, liabilities and / or damages relating to or arising out of in any way to test service.

\*Signature:

\*Date(YY/MM/DD) :

## Infection Control Agreement for COVID- 19

Due to the problematic situation of the pandemic novel coronavirus (COVID- 19), we follow the World Health Organization (WHO). When collecting a sample for our test, please follow the requirements below:

1. Before the patient enters the sample collection site, the body temperature must be checked if the body temperature of the patient is average (37.3 degrees Celsius or below,  $\leq 37.3^{\circ}\text{C}$ ), he or she can enter. Suppose the body temperature of clients is higher than  $>37.3^{\circ}\text{C}$ . In that case, he or she is advised to visit the hospital and have a diagnosis or treatment to rule out the susceptibility of novel coronavirus before he or she returns for the sample collection.
2. To avoid the spread of infection, apart from taking a photo, the client must wear a surgical mask during the entire process of sample collection on the site.
3. Sample collector needs to register personal information of the patient and inform the health status of the patient.
4. The patient shall report whether he or she has visited any epidemic area or countries in the past two weeks ( 14 days) or has any close contact with a suspected patient or patient with the novel coronavirus.
5. The patient shall report if he or she has any symptoms such as fever, fatigue, dry cough, diarrhea, etc., within the past two weeks ( 14 days).
6. To protect the health of all personnel, please provide the information truthfully. We have the right not to conduct the test for those who do not cooperate, such as refusing to measure the body temperature, not wearing the surgical mask, deliberately concealing travel and contact history, and being unable to explain their recent health condition.

I agree and provide truthful information about my current health condition, travel, and contact history within the past two weeks ( 14 days). My signature below indicates my agreement.

Signature:

Date :