



## ***Manufacturer's Information*** **Test No. 24-5801: DNA-Mixture**

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Each sample set consisted of two known bloodstains on white fabric (Items 1 and 2), and two questioned stains on colored fabric (Items 3 and 4). Participants were asked to analyze these items using their existing protocols.

**SAMPLE PREPARATION:** The stains on Items 1, 2, and 4 were prepared using human whole blood which was either drawn into citric acid preservative bags or EDTA tubes. The stain on Item 3 was prepared using a mixture of human whole blood and semen. Item 1 (50  $\mu$ L) was created using blood from a female donor. Item 2 (50  $\mu$ L) was created using blood from a male donor. Item 3 (50  $\mu$ L) was created using a 1:1 mixture of blood from the female donor used in Item 1 and semen from the male donor used in Item 2. Item 4 (50  $\mu$ L) was created using a 1:1 mixture of blood from the female donor used in Item 1 and blood from a male donor whose known standard was not provided. Stains from different sources were prepared at separate times and were packaged once they were thoroughly dried. Completed sample sets were stored at -20°C until shipment on January 02, 2024 following completion of the verification stage.

**SAMPLE SET ASSEMBLY:** For each sample set, all Items (1-4) were packaged into separate envelopes and then placed together in a pre-labeled sample set envelope and sealed. The sealed sample set envelopes were then packaged in pre-labeled heat seal envelopes and sealed. This process was repeated until all of the sample sets were prepared.

**VERIFICATION:** All predistribution laboratories confirmed the manufacturer's expected associations. Consistent allelic results were reported for all STR and YSTR loci.

**Manufacturer's Information, continued**  
**Test No. 24-5801: DNA-Mixture**

<b>Amelogenin and STR Results</b>						
<i>Results compiled from predistribution laboratories and a consensus of at least 10 participants.</i>						
<b>Item</b>	<b>D1S1656</b>	<b>D2S1338</b>	<b>D2S441</b>	<b>D3S1358</b>	<b>D5S818</b>	<b>D6S1043</b>
	<b>D7S820</b>	<b>D8S1179</b>	<b>D10S1248</b>	<b>D12S391</b>	<b>D13S317</b>	<b>D16S539</b>
	<b>D18S51</b>	<b>D19S433</b>	<b>D21S11</b>	<b>D22S1045</b>	<b>Amelogenin</b>	<b>CSF1PO</b>
	<b>FGA</b>	<b>Penta D</b>	<b>Penta E</b>	<b>SE33</b>	<b>TH01</b>	<b>TPOX</b>
	<b>vWA</b>	<b>DYS391</b>	<b>DYS570</b>	<b>DYS576</b>	<b>Y Indel</b>	
1	15,17.3	17,20	10,14	16,17	11,11	*
	12,12	13,14	13,13	20,24	11,12	11,13
	12,12	14,14.2	31.2,32.2	11,15	X,X	11,12
	19,23	13,13	5,7	20,27.2	7,9.3	8,12
	15,17	NM	NM	NM	NM	
2	12,15	16,18	11,14	15,15	11,13	*
	8,10	11,15	14,14	19,23	10,12	9,11
	12,16	13,15	29,31.2	15,15	X,Y	10,11
	20,23	13,13	7,12	28.2,29.2	7,8	8,11
	16,17	10	17	15	2	
3-Blood	15,17.3	17,20	10,14	16,17	11,11	*
	12,12	13,14	13,13	20,24	11,12	11,13
	12,12	14,14.2	31.2,32.2	11,15	X,X	11,12
	19,23	13,13	5,7	20,27.2	7,9.3	8,12
	15,17	NM	NM	NM	NM	
3-Semen	12,15	16,18	11,14	15,15	11,13	*
	8,10	11,15	14,14	19,23	10,12	9,11
	12,16	13,15	29,31.2	15,15	X,Y	10,11
	20,23	13,13	7,12	28.2,29.2	7,8	8,11
	16,17	10	17	15	2	
4	14,15,16,17.3	17,20,21	10,11,14	15,16,17	11,12	*
	8,12	13,14	13,14	18,19,20,24	11,12	11,12,13
	12,13,17	14,14.2,15	30.2,31.2,32.2	11,14,15,17	X,Y	10,11,12
	19,20,22,23	10,11,13	5,7,16,20	14,20,27.2,30.2	7,9,9.3	8,10,11,12
	15,16,17	11	20	17	2	

<b>YSTR Results</b>									
<i>Results compiled from predistribution laboratories and a consensus of at least 10 participants.</i>									
<b>Item</b>	<b>DYF387S1</b>	<b>DYS19</b>	<b>DYS385</b>	<b>DYS389-I</b>	<b>DYS389-II</b>	<b>DYS390</b>	<b>DYS391</b>	<b>DYS392</b>	<b>DYS393</b>
	<b>DYS437</b>	<b>DYS438</b>	<b>DYS439</b>	<b>DYS448</b>	<b>DYS449</b>	<b>DYS456</b>	<b>DYS458</b>	<b>DYS460</b>	<b>DYS481</b>
	<b>DYS518</b>	<b>DYS533</b>	<b>DYS549</b>	<b>DYS570</b>	<b>DYS576</b>	<b>DYS627</b>	<b>DYS635</b>	<b>DYS643</b>	<b>YGATAH4</b>
2	38,39	15	13,14	12	28	22	10	11	12
	16	11	11	22	30	16	15	9	21
	37	10	12	17	15	19	22	12	11
3-Semen	38,39	15	13,14	12	28	22	10	11	12
	16	11	11	22	30	16	15	9	21
	37	10	12	17	15	19	22	12	11
4	34,36	14	11,15	13	29	23	11	13	13
	15	12	12	19	29	16	17	12	23
	38	12	13	20	17	22	23	10	11

\* Results were not received by a minimum of 10 participants for the loci indicated.

NM - Non-Male profile, YSTR results not expected.

*The information presented here is that received from the sample manufacturer. It presents details of the design specification for the test samples and/or details of how they were prepared. This information does not necessarily represent the results that should or could be obtained from an examination of the sample. Final interpretation of the results should be deferred until the summary report is available.*