

This distribution contained the following specimens;
 Specimen 0501AH1 (01AH1) was from a single donation of HbA/S blood.
 Specimen 0501AH2 (01AH2) was from a single donation of normal adult blood.
 Specimen 0501AH3 (01AH3) was from a single donation of normal adult blood to which cord blood had been added

Specimens were distributed to 309 participants.
 299 participants returned results sheets.
 This represents an overall return rate of 96.8%

Specimen Quality	Specimen	01AH1	01AH2	01AH3
	Satisfactory	299	299	299
	Unsatisfactory	0	0	0

Sickle Screen									
Specimen	04AH1			04AH2			04AH3		
	Equivocal	Negative	Positive	Equivocal	Negative	Positive	Equivocal	Negative	Positive
All Methods	0	1	268	0	259	0	0	258	0
Clin Tech	0	0	14	0	14	0	0	14	0
Coverslip reduction	0	0	12	0	11	0	0	11	0
Dade "Sickle-sol"	0	0	1	0	1	0	0	1	0
DiaMed-ID Sickle Cell Test	0	0	1	0	1	0	0	1	0
HD Supplies	0	0	18	0	18	0	0	18	0
Lorne	0	0	12	0	12	0	0	12	0
Microgen Bioproducts/S-Test/M96-50	0	0	49	0	48	0	0	48	0
Ortho "Sickledex"	0	0	97	0	95	0	0	95	0
Pacific Haemostasis	0	0	1	0	1	0	0	1	0
Solubility	0	0	45	0	40	0	0	40	0
TCS Microbiology "Sickle-Check Hb-S"	0	0	9	0	9	0	0	9	0
Other - please specify	0	1	9	0	9	0	0	8	0

Fraction Identification	01AH1		01AH2		01AH3	
	Correct	Incorrect	Correct	Incorrect	Correct	Incorrect
	235	2	233	4	234	2

HbA2 Quantitation (% Hb)								
Specimen	Method	Mean	GCV	N	Reported Range		Number of Outliers	
					Min	Max	< -3SD	> +3SD
01AH2	All Methods	2.97	10.2	241	2.0	6.3	4	5
	Electrophoresis	2.93	13.3	13	2.0	3.9		
	Automated Densitometry			4	2.1	3.2		
	Column Chromatography	3.11	14.0	77	2.0	6.3		
	HPLC	2.93	7.5	146	2.2	3.6		
	Other - Please specify			1				
01AH3	All Methods	2.40	13.6	240	1.3	4.8	5	1
	Electrophoresis	2.39	10.3	13	1.9	2.8		
	Automated Densitometry			4	1.4	2.6		
	Column Chromatography	2.55	17.9	76	1.3	4.8		
	HPLC	2.35	10.9	146	1.7	2.9		
	Other - Please specify			1				

Participants assessment of their result against their reference range for a normal adult male				
Specimen	Assessment (%)			
	Low	Normal	High	Uncertain
01AH2	0.0	87.3	8.2	4.5
01AH3	3.7	95.4	0.9	0.0

HbF Quantitation (% Hb)								
Specimen	Method	Mean	GCV	N	Reported		Number of outliers	
					Minimum	Maximum	< -3S	> +3S
01AH1	All Methods	0.72	36.8	197 ¹	0.0	2.4	5	1
	Alkaline Denaturation - Betke	0.66	40.3	40	0.1	1.6		
	Alkaline Denaturation - Other			3	0.5	1.7		
	Alkaline Denaturation - Singer			1				
	Automated Densitometry			0 ²				
	Column Chromatography			0				
	Electrophoresis			1 ³				
	HPLC	0.72	31.2	141 ⁴	0.0	2.4		
	Radial Immunodiffusion	0.97	57.4	10 ⁵	0.5	1.5		
	Other - Please specify			0 ⁶				
1. 20 laboratories returned a result as "less than" (<) and 3 laboratories returned a result as 0, these results are not included in the count 2. 1 laboratory returned a result as "less than" (<), this laboratory is not included in the count 3. 1 laboratory returned a result as "less than" (<), this laboratory is not included in the count 4. 15 laboratories returned a result as "less than" (<) and 3 laboratories returned a result as 0, these results are not included in the count 5. 2 laboratories returned a result as "less than" (<), these results are not included in the count 6. 1 laboratory returned a result as "less than" (<), this laboratory is not included in the count								
01AH2	All Methods	0.75	38.1	196 ¹	0.0	5.6	7	3
	Alkaline Denaturation - Betke	0.66	46.8	40	0.1	5.6		
	Alkaline Denaturation - Other			3	0.8	1.4		
	Alkaline Denaturation - Singer			1				
	Automated Densitometry			0 ²				
	Column Chromatography			0				
	Electrophoresis			1 ³				
	HPLC	0.73	25.4	138 ⁴	0.0	1.6		
	Radial Immunodiffusion	1.34	57.1	12 ⁵	0.5	2.2		
	Other - Please specify			0 ⁶				
1. 19 laboratories returned a result as "less than" (<) and 4 laboratories returned a result as 0, these results are not included in the count 2. 1 laboratory returned a result as "less than" (<), this laboratory is not included in the count 3. 1 laboratory returned a result as "less than" (<), this laboratory is not included in the count 4. 15 laboratories returned a result as "less than" (<) and 4 laboratories returned a result as 0, these results are not included in the count 5. 1 laboratory returned a result as "less than" (<), this laboratory is not included in the count 6. 1 laboratory returned a result as "less than" (<), this laboratory is not included in the count								
01AH3	All Methods	5.51	20.3	224 ¹	0.3	19.0	8	7
	Alkaline Denaturation - Betke	4.49	27.6	40	1.5	6.3		
	Alkaline Denaturation - Other			3	3.1	7.2		
	Alkaline Denaturation - Singer			1				
	Automated Densitometry			1				
	Column Chromatography			0				
	Electrophoresis			5	5.2	8.5		
	HPLC	5.63	10.0	159 ²	0.3	8.0		
	Radial Immunodiffusion	10.03	17.0	13	7.0	19.0		
	Other - Please specify			1				
1. 1 laboratory returned a result as "less than" (<), this laboratory is not included in the count 2. 1 laboratory returned a result as "less than" (<), this laboratory is not included in the count								

Participants assessment of their result against their reference range for a normal adult male			
Specimen	Assessment (%)		
	Normal	High	Uncertain
01AH1	94.9	5.1	0
01AH2	93.5	6.0	0.5
01AH3	1.5	98.0	0.5

HbS Quantitation (% Hb)

Specimen	Method	Mean	GCV	N	Reported range		Number of Outliers	
					Min	Max	< -3S	> +3S
01AH1	All Methods	40.33	5.0	213	29.0	47.0	5	1
	Electrophoresis	39.73	7.1	21	32.2	46.0		
	Automated Densitometry	41.23	5.5	16	30.0	46.7		
	Column Chromatography	38.55	7.3	32	29.0	44.4		
	HPLC	40.64	3.7	142	34.7	44.9		
	Other - Please Specify				1			

Comments:
Sickle screen:

Participants are asked to test all three specimens by their sickle screening method.

Specimen 01AH1

One participant reported a negative Sickle Screening Test on this specimen but reported the presence of Hb S in the fraction ID.

Specimen 01AH2

All participants reported a negative Sickle Screening Test on this specimen.

Specimen 01AH3

All participants reported a negative Sickle Screening Test on this specimen..

Fraction Identification:

Participants are asked to record the presence of all haemoglobin fractions, including Hb A, Hb A₂ and Hb F. The reporting of the presence of Hb A₂ and Hb F is not included in the performance assessment, but participants' responses are summarized in the comments for each specimen.

Specimen 01AH1

- One participant reported "C or E but unable to identify further".
- One participant did not report the presence of Hb A.

131 participants reported the presence of Hb F and 159 the presence of Hb A₂.

Specimen 01AH2

- One participant reported "C or E but unable to identify further".
- Two participants reported the presence of a non-specified fraction.
- One participant did not report the presence of Hb A.

129 participants noted the presence of Hb F and 187 the presence of Hb A₂.

Specimen 01AH3

- One participant reported "C or E but unable to identify further".
- One participant did not report the presence of Hb A.

186 participants noted the presence of Hb F and 186 the presence of Hb A₂.

Supplementary report:

An additional supplement summarizing participants' interpretation of their results is enclosed with this report.