HEMOGLOBIN

(DRABKIN'S METHOD)

BEACON

Code	Product Name	Pack Size
LS044A	Hemoglobin (Drabkin's method)	1 x 1 L
LS044B	Hemoglobin (Drabkin's method)	1 x 5 L

Principle:

In alkaline medium Hemoglobin and it's derivatives are oxidized in presence potassium ferricyanide and get converted to methemoglobin which then reacts with potassium cyanide to form purple red colored cyanmethemoglobin complex the intensity of which is measured at 546 nm or green filter.

Reagent :

Reagent 1: Drabkin's solution.(ready to use)

Reagent 2: CMG Standard

Sample:

whole blood using EDTA /Oxalate or Heparin in anticoagulant.

Storage And Stability :

Reagent 1 stable at room temperature and Reagent 2 stable at +2C°-+8°C till the expiry date.

Procedure :

	Blank	Test
Working Drabkin's solution	5.0 ml	5.0 ml
Blood (use Sahlis's pipette)	-	20 μl

Mix well the above tubes and allow to stand at R.T. for 5 minutes.Measure the Absorbance of test against blank at 546nm or green filter. Take the absorbance of cyanmethemoglobin standard directly (without adding working reagent), against blank at 546nm or green filter.

Test Results:

Blood Hemoglobin in gm%

$$\frac{\text{Abs.of Test}}{\text{Abs. of Std.}} \times 15.06 \text{ (Std. Conc. as stamped on the vial } \times \text{ 0.251)}$$

Normal Value :

Men : 13.5-18.0 gm %
women : 11.5-16.4 gm %

References:

1. Dacie J. V. and Lewis. S. M. (1968) Practical Hematology, 4th edition, J and A, Churchill, U. K. P. 37.
2. I. C. S. H., Committee (1978), Journal of clinical pathology, 31. 139.

Symbols Used On Labels

REF	Catalogue Number		Manufacturer	CONT	Content		Storage Temperature
	See Instruction for Use	LOT	Lot Number		Expiry Date	IVD	In Vitro Diagnostics

BEA/24/HEB/LS/IFU VER-03
21/09/2025

BEACON DIAGNOSTICS PVT. LTD. *424, NEW GIDC, KABILPORE, NAVSARI - 396 424. INDIA*

HEMOGLOBIN ESTIMATION CHART READY RECKONER

Std conc =60 mg %

O.D.Test / O.D.Std.X 15.06 (Std.conc. as stamped on the vial X 0.251)

.45	28.23	27.10	26.06	25.09	24.20	23.36	22.59	21.86	21.17	20.53	19.93	19.36	18.82	18.31	17.83	17.37	16.94	16.52	16.13	15.76	15.40	15.06
.44	27.60	26.50	25.48	24.54	23.66	22.84	22.08	21.37	20.70	20.07	19.48	18.93	18.40	17.90	17.43	16.99	16.56	16.16	15.77	15.41	15.06	14.72
.43	26.98	25.90	24.90	23.98	23.12	22.33	21.58	20.88	20.23	19.62	19.04	18.50	17.98	17.50	17.04	16.60	16.18	15.79	15.41	15.06	14.71	14.39
.42	26.35	25.30	24.32	23.42	22.59	21.81	21.08	20.40	19.76	19.16	18.60	18.07	17.56	17.09	16.64	16.21	15.81	15.42	15.06	14.70	14.37	14.05
.41	25.72	24.69	23.74	22.86	22.05	21.29	20.58	19.91	19.29	18.71	18.16	17.64	17.15	16.68	16.24	15.83	15.43	15.06	14.70	14.35	14.03	13.72
.40	25.09	24.09	23.16	22.31	21.51	20.77	20.07	19.43	18.82	18.25	17.71	17.21	16.73	16.28	15.85	15.44	15.06	14.69	14.34	14.00	13.69	13.38
.39	24.47	23.49	22.59	21.75	20.97	20.25	19.57	18.94	18.35	17.79	17.27	16.78	16.31	15.87	15.45	15.06	14.68	14.32	13.98	13.65	13.34	13.05
.38	23.84	22.89	22.01	21.19	20.43	19.73	19.07	18.46	17.88	17.34	16.83	16.35	15.89	15.46	15.06	14.67	14.30	13.95	13.62	13.30	13.00	12.71
.37	23.21	22.28	21.43	20.63	19.90	19.21	18.57	17.97	17.41	16.88	16.38	15.92	15.47	15.06	14.66	14.28	13.93	13.59	13.26	12.95	12.66	12.38
.36	22.59	21.65	20.85	20.07	19.36	18.69	18.07	17.48	16.94	16.42	15.94	15.49	15.06	14.65	14.26	13.90	13.55	13.22	12.90	12.60	13.32	12.04
.35	21.96	21.08	20.27	19.52	18.82	18.17	17.56	17.00	16.47	15.97	15.50	15.06	14.64	14.24	13.87	13.51	13.17	12.85	12.54	12.25	11.97	11.71
.34	21.33	20.48	19.69	18.96	18.28	17.65	17.06	16.51	16.00	15.51	15.06	14.62	14.22	13.83	13.47	13.12	12.80	12.48	12.19	11.90	11.63	11.37
.33	20.70	19.87	19.11	18.40	17.74	17.13	16.56	16.03	15.53	15.06	14.61	14.19	13.63	13.43	13.07	12.14	12.42	12.12	11.83	11.55	11.29	11.04
.32	20.07	19.27	18.53	17.84	17.21	16.61	16.06	15.54	15.06	14.60	14.17	13.76	13.38	13.02	12.68	12.35	12.04	11.75	11.47	11.20	10.95	10.70
.31	19.45	18.67	17.95	17.29	16.67	16.09	15.56	15.06	14.58	14.14	13.73	13.33	12.96	12.61	12.28	11.97	11.67	11.38	11.11	10.82	10.61	10.37
.30	18.82	18.07	17.37	16.73	16.13	15.57	15.06	14.57	14.11	13.69	13.28	12.90	12.54	12.21	11.88	11.58	11.29	11.01	10.75	10.50	10.26	10.03
.29	18.19	17.46	16.79	16.17	15.59	15.06	14.55	14.08	13.64	13.23	12.84	12.37	12.13	11.80	11.49	11.19	10.91	10.65	10.39	10.15	09.92	09.70
.28	17.56	16.86	16.21	15.61	15.06	14.54	14.05	13.60	13.17	12.77	12.40	12.04	11.71	11.39	11.09	10.81	10.54	10.28	10.03	09.80	09.58	09.37
.27	16.94	16.26	15.63	15.06	14.52	14.02	13.55	13.11	12.70	12.32	11.95	11.61	11.29	10.98	10.70	10.42	10.16	09.91	09.68	09.45	09.24	09.03
.26	16.31	15.66	15.06	14.50	13.98	13.50	13.05	12.63	12.23	11.86	11.51	11.18	10.87	10.58	10.30	10.03	09.78	09.55	09.32	09.10	08.89	08.70
.25	15.68	15.06	14.48	13.94	13.44	12.98	12.54	12.14	11.76	11.40	11.07	10.75.	10.45	10.17	09.90	09.65	09.41	09.18	08.96	08.75	08.55	08.36
.24	15.06	14.45	13.90	13.38	12.90	12.46	12.46	11.65	11.29	10.95	10.63	10.32	10.03	09.76	09.51	09.26	09.03	08.81	08.60	08.40	08.21	08.03
.23	14.43	13.85	13.32	12.82	12.37	11.94	11.94	11.17	10.82	10.49	10.18	09.89	09.62	09.36	09.11	08.88	08.65	08.44	08.24	08.05	07.87	07.69
.22	13.80	13.25	12.74	12.27	11.83	11.42	11.04	10.68	10.35	10.03	09.74	09.46	09.20	08.95	08.71	08.49	08.28	08.08	07.88	07.70	07.53	07.36
.21	13.17	12.65	12.16	11.71	11.29	10.90	10.54	10.20	09.88	09.58	09.30	09.03	08.78	08.54	08.32	08.10	07.90	07.71	07.53	07.35	07.18	07.02
.20	12.54	12.04	11.58	11.15	10.75	10.38	10.03	09.71	09.41	09.12	08.85	08.60	08.36	08.14	07.92	07.72	07.53	07.34	07.17	07.00	06.84	06.69
.19	11.92	11.44	11.00	10.59	10.21	09.86	09.53	09.23	08.94	08.67	08.41	08.17	07.94	07.73	07.53	07.33	07.15	06.97	06.81	06.65	06.50	06.35
.18	11.29	10.84	10.42	10.03	09.68	09.34	09.03	08.74	08.47	08.21	07.97	07.74	07.53	07.32	07.13	06.95	06.77	06.61	06.45	06.30	06.16	06.02
.17	10.66	10.24	09.84	09.48	09.14	08.82	08.53	08.25	08.00	07.75	07.53	07.31	07.11	06.91	06.73	06.56	06.40	06.24	06.09	05.95	05.81	05.68
.16	10.03	09.63	09.26	08.92	08.60	08.30	08.03	07.77	04.53	07.30	07.08	06.88	06.69	06.51	06.34	06.17	06.02	05.87	05.73	05.60	05.47	05.35
.15	09.41	09.03	08.68	08.36	08.06	07.78	07.53	07.28	07.05	06.84	06.64	06.45	06.27	06.10	05.94	05.79	05.64	05.50	05.37	05.25	05.13	05.01
	.24	.25	.26	.27	.28	.29	.30	.31	.32	.33	.34	.35	.36	.37	.38	.39	.40	.41	.42	.43	.44	.45

O.D. Test

O.D. std.