Hemoglobins According to Zone: Z1 - Z15

ZONE	Hemoglobins
Z1	Hb Delta A2'
	Hasharon-Hb A2 variant
	Q-India-Hb A2 variant
	Q-Thailand-Hb A2 variant
	Winnipeg-Hb A2 variant
	Other alpha chain-A2 variants
	Other Hb A2 variants
Z2	Нь С
	Hb Constant Spring
	Setif-Hb A2 variant
Z3	Hb A2
	Hb O-Arab
Z4	Hb E
	Hb Köln
	M-Iwate-Hb A2 variant
	Other Hb A2 variants
	(degraded Hb C)
Z 5	Hb S
	Hb Hasharon
	Hb Handsworth
	(degraded Hb O-Arab)
Z6	Hb D-Punjab/ Los Angeles
	Hb D-Ouled Rabah
	Hb D-Iran
	Hb Lepore
	Hb G-Philadelphia
	Hb Korle-Bu/ G-Accra
	Hb Köln
	Hb Osu Christiansborg
	Hb Winnipeg
	Hb Setif
	Hb Stanleyville II
	Hb G-Taipei
	Hb Q-India
	Hb Q-Iran
	Hb P-Nilotic
	J-Toronto-Hb A2 variant
	J-Rovigo-Hb A2 variant
	(degraded Hb E)

ZONE	Hemoglobins
Z 7	Hb F
	Hb Q-Thailand/ G-Taichung
	Hb Porto-Alegre
	Hb Richmond
	Hb G-San Jose
	Hb Geldrop Santa Anna
	Hb Presbyterian
	(degraded Hb S)
Z 8	Hb Atlanta
	Hb Athens-GA/ Waco
	acetylated Hb F
Z 9	Hb A
	Hb Okayama
	Hb Camperdown
	Hb Toulon
	Hb Hekinan
	Hb Phnom Penh
	Hb Raleigh
	Hb Fontainebleau
	Hb Mosella
	Hb Dallas
	Hb Aztec
	Hb Little Rock
	Hb Frankfurt
Z10	Hb Hope
	Hb M-Iwate
Z11	Hb New York/ Kaohsiung
	Hb Himeji
	(degraded Hb A)
Z12	Hb Bart's
	Hb Providence
	Hb Mexico/ J-Paris-II
	Hb J-Baltimore
	Hb J-Broussais
	Hb J-Meinung/J-Bangkok
	Hb Ube-2
=	Hb J-Toronto
Z13	Hb N-Baltimore
=	Hb J-Rovigo
Z15	Hb H

Hemoglobin Retention time

Variant name	n ^a	Retention time, ^b min
Hb Barts	ND ^f	0.2
Hb H	12	0.2
Hb F _i	ND	0.5
Hb F	160g	1.10 (0.017)
Hb Hope	11	1.39 (0.007)
Hb Camden	2	1.50; 1.48
Hb J-Oxford	1	1.60
Hb Austin	3	1.68 (0.017)
Hb N-Baltimore	6	1.70 (0.031)
Hb Fukuyama	2	1.72; 1.73
Hb Fannin-Lubbock	7	1.75 (0.024)
Hb J-Anatolia	2	1.75; 1.75
Hb J-Mexico	2	1.74; 1.78
Hb J-Meerut	2	1.88; 1.88
Hb J-Toronto	1	1.94
Hb J-Bangkok	1	2.02
Hb Ty Gard	1	2.20
Hb Köln ^j	2	2.26; 2.26 (4.93; 4.87) ^j
Hb A _o	160 ^g	2.43 (0.041)
Hb New York	4 ^k	2.43 (0.010)
Hb Twin Peaks	3	Appears as hump
Hb Lepore	3	3.37 (0.019)
Hb D-Iran	1	3.49
Hb A ₂	160 ^g	3.63 (0.035)
Hb E	83'	3.69 (0.069)
Hb Osu-Christiansborg	1	3.77
Hb G-Honolulu	1	3.86
Hb Korle-Bu	8	3.92 (0.050)
Hb D-Punjab	7	4.18 (0.007)
Hb G-Philadelphia	8	4.22 (0.037)
Hb E-Saskatoon	2	4.34; 4.32
Hb S	3587"	4.51 (0.030)
Hb Manitoba	1	4.58
Hb Montgomery	7	4.58 (0.020)
Hb A ₂ '	81°	4.59 (0.030)
Hb Q-Thailand	1	4.67
Hb Hasharon	7	4.83 (0.016)
Hb O-Arab	6	4.91 (0.008)
Hb G-Siriraj	1	5.08
Hb C	962 ^p	5.18 (0.013)

Ref: Clinical Chemistry 50:10 1736–1747 (2004)