



Liquichek™ Immunology Control Levels 1, 2 and 3



591 Level 1 6 x 1 mL
 592 Level 2 6 x 1 mL
 593 Level 3 6 x 1 mL
 590X MiniPak 3 x 1 mL

594 Level 1 6 x 3 mL
 595 Level 2 6 x 3 mL
 596 Level 3 6 x 3 mL



EXP 2023-03-31



68980

Level 1 68981
 Level 2 68982
 Level 3 68983



<http://www.myeinserts.com/68980>

INTENDED USE

Liquichek Immunology Control is intended for use as an assayed quality control serum to monitor the precision of laboratory testing procedures for the analytes listed in this package insert.

SUMMARY AND PRINCIPLE

The use of quality control materials is indicated as an objective assessment of the precision of methods and techniques in use and is an integral part of good laboratory practices. Multiple levels of control are available to allow monitoring of the test system's reliability.

For customers in Germany: Quality control materials are required for assessment of laboratory performance as described in the "Guideline for Quality Assurance of Medical Laboratory Examinations following the German Medical Association" (Rili-BÄK regulation).

REAGENT

This product is prepared from defibrinated human plasma with added serum proteins, stabilizers and preservatives. This product is provided in liquid form for convenience.

STORAGE AND STABILITY

This product will be stable until the expiration date when stored unopened at -20 to -70°C.

Thawed Unopened: When thawed and stored unopened at 2 to 8°C, this product will be stable as follows:

- All Analytes: 45 days

Except:

- Beta-2-Microglobulin: 40 days

- Rheumatoid Factor: 10 days

Thawed Opened: Once thawed, opened, and stored tightly capped at 2 to 8°C, this product will be stable as follows:

- All analytes: 30 days

Except:

- Beta-2-Microglobulin: 21 days

- Rheumatoid Factor: 10 days

Do not refreeze this product after opening the vials.

This product is shipped under frozen conditions.

PROCEDURE

This product should be treated the same as patient specimens and run in accordance with the instructions accompanying the instrument, kit, or reagent being used.

If the product has been stored frozen, allow it to stand at room temperature (18 to 25°C) until it is completely thawed. Before sampling, gently swirl the vial several times to ensure homogeneity. Store the thawed product at 2 to 8°C.

If the product has been stored refrigerated, allow it to reach room temperature (18 to 25°C) before use. Gently swirl the vial several times to ensure homogeneity. After each use promptly replace the stopper and return to 2 to 8°C storage.

Dispose of any discarded materials in accordance with the requirements of your local waste management authorities. In the event of damage to packaging, contact the local Bio-Rad Laboratories Sales Office or Bio-Rad Laboratories Technical Services.

LIMITATIONS

1. This product should not be used past the expiration date.
2. If there is evidence of microbial contamination or excessive turbidity in the product, discard the vial.
3. This product is not intended for use as a standard.
4. Values may increase over the product shelf life for the following analyte: Apolipoprotein A-I. Individual laboratory means may fall outside of the corresponding acceptable range printed in the data charts.

WARNING



Biological source material. Treat as potentially infectious.

Each human donor unit used to manufacture this product was tested as required by FDA accepted methods. Tests results were non-reactive or negative for evidence of infection due to Human Immunodeficiency Virus (HIV), Hepatitis B Virus (HBV) and Hepatitis C Virus (HCV). This product may also contain other human source materials for which there are no approved tests. In accordance with good laboratory practice, all human source material should be considered potentially infectious and handled with the same precautions used with patient specimens.

Safety Data Sheet (SDS) available for professional users on www.bio-rad.com.

SPECIFIC PERFORMANCE CHARACTERISTICS

This product is a stabilized liquid product manufactured under rigid quality control standards. To obtain consistent assay values, the control requires proper storage and handling as described.

ASSIGNMENT OF VALUES

The mean values and corresponding $\pm 3SD$ ranges in the Assignment of Values Data Charts (available separately) were derived from replicate analyses and are specific for this lot of product. Data from Unity™ Interlaboratory Program are included in the determination of some ranges. The tests listed were performed by the manufacturer and/or independent laboratories using manufacturer supported reagents and a representative sampling of this lot of product. It is recommended that each laboratory establish its own acceptable ranges and use those provided only as guides. Laboratory established ranges may vary from those listed during the life of this control. [Customers in Germany have to follow the requirements as described in the Rili-BÄK regulation.] Variations over time and between laboratories may be caused by differences in laboratory technique, instrumentation and reagents, or by manufacturer test method modifications.

Unity™ Interlaboratory Program is a proprietary Bio-Rad software program holding more than 2 billion QC data points from thousands of laboratories.

INSTRUCTIONS FOR OBTAINING THE DATA CHARTS

The Data Charts are available through the Internet, at www.myeinserts.com/68980. Follow the directions at the website to receive email notifications of insert updates. Alternate methods for receiving data charts are available by contacting your local Bio-Rad Laboratories Office.

ANALYTES

ADNase B (Antideoxyribonuclease-B)	Apolipoprotein B	IgG Subclass 1	Lipoprotein (a)
Albumin	Beta-2-Microglobulin	IgG Subclass 2	Prealbumin
Alpha 1-Antitrypsin	C1 Inhibitor	IgG Subclass 3	Properdin Factor B ○
Alpha 2-Macroglobulin	Ceruloplasmin	IgG Subclass 4	Protein Serum (Total)
Alpha-1-Acid Glycoprotein	Complement C3	Immunoglobulin A (IgA)	Retinol Binding Protein (RBP) ○
Anti-cyclic Citrullinated Peptide (Anti-CCP)	Complement C4	Immunoglobulin E (IgE)	Rheumatoid Factor
Antistreptolysin-O	C-Reactive Protein (CRP)	Immunoglobulin G (IgG)	Transferrin
Antithrombin III (AT III)	Cystatin C ◆	Immunoglobulin M (IgM)	
Apolipoprotein A-I	Ferritin	Kappa Light Chain	
	Haptoglobin	Lambda Light Chain	

NOTES

- ◆ Endogenous levels only.
- Values are not provided.



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04/20

Revision Date 2022-02-04 → Indicates Revised Information
METHOD (1)

	Units	Level 1 - 68981		Level 2 - 68982 (2)		Level 3 - 68983 (2)	
		Mean	Range	Mean	Range	Mean	Range
ADNASE B (ANTIDEOXYRIBONUCLEASE-B)							
Beckman Coulter IMMAGE	U/mL	59.3	<50.0 – 70.3	87.4	69.3 – 105	111	86.9 – 135
Siemens BN Series Nephelometers	U/mL	<75.0		124	97.8 – 151	172	135 – 210
ALBUMIN							
Abbott Alinity c Analyzer (Bromcresol green)	g/dL	2.30	1.91 – 2.69	3.89	3.23 – 4.55	5.19	4.30 – 6.07
Abbott ARCHITECT cSystems (Bromcresol green)	g/dL	2.37	2.20 – 2.53	3.92	3.71 – 4.13	5.18	4.93 – 5.43
Abbott ARCHITECT cSystems (Bromcresol purple)	g/dL	2.23	2.05 – 2.41	3.59	3.33 – 3.86	4.84	4.48 – 5.19
Beckman Coulter AU Systems	g/dL	2.33	2.08 – 2.58	3.83	3.47 – 4.18	5.08	4.63 – 5.53
Beckman Coulter IMMAGE	g/dL	2.11	1.75 – 2.46	3.72	3.08 – 4.35	5.09	4.22 – 5.97
Beckman Coulter Synchron/UniCel DxC Series	g/dL	2.20	2.00 – 2.40	3.70	3.38 – 4.02	5.03	4.61 – 5.46
Binding Site Optilite (3)	g/dL	2.39	1.91 – 2.86	3.90	3.12 – 4.68	5.22	4.18 – 6.27
Binding Site SPAPlus (3)	g/dL	2.38	1.91 – 2.86	3.90	3.12 – 4.68	5.22	4.18 – 6.27
Ortho Vitros Microslide Series	g/dL	1.97	1.74 – 2.21	3.42	3.11 – 3.72	4.59	4.22 – 4.95
Roche / Hitachi cobas cSystems (ALB2)	g/dL	2.42	1.97 – 2.87	4.05	3.56 – 4.54	5.33	4.82 – 5.85
Roche / Hitachi cobas cSystems (ALB2) (Tina-quant)	g/dL	2.31	1.96 – 2.65	3.83	3.31 – 4.34	5.19	4.53 – 5.86
Roche cobas INTEGRA (Bromcresol green)	g/dL	2.49	2.12 – 2.86	4.13	3.73 – 4.53	5.36	4.93 – 5.79
Siemens ADVIA Chemistry Systems (ALB, ALB_c)	g/dL	2.35	1.93 – 2.77	4.00	3.45 – 4.54	5.44	4.77 – >6.00
Siemens ADVIA Chemistry Systems (ALBP)	g/dL	2.10	1.93 – 2.27	3.50	3.26 – 3.74	4.73	4.43 – 5.03
Siemens Atellica Solution (Alb) (CH)	g/dL	2.37	1.99 – 2.74	3.98	3.58 – 4.39	5.42	4.98 – 5.86
Siemens Atellica Solution (AlbP) (CH)	g/dL	2.10	1.92 – 2.28	3.50	3.24 – 3.76	4.79	4.45 – 5.13
Siemens BN Series Nephelometers	g/dL	2.40	2.01 – 2.80	3.96	3.28 – 4.63	5.15	4.26 – 6.04
Siemens Dimension Vista Systems	g/dL	2.13	1.91 – 2.36	3.52	3.21 – 3.83	4.85	4.46 – 5.24
ALPHA 1-ANTITRYPSIN							
Abbott Alinity c Analyzer	mg/dL	65.8	58.0 – 73.6	109	98.8 – 119	146	134 – 157
Beckman Coulter AU Systems	mg/dL	§		§		§	
Beckman Coulter IMMAGE	mg/dL	73.4	50.7 – 96.1	125	96.1 – 154	167	133 – 202
Binding Site Optilite (3)	mg/dL	63.2	50.5 – 75.8	109	87.3 – 131	154	124 – 185
Binding Site SPAPlus (3)	mg/dL	72.4	57.9 – 86.9	115	92.1 – 138	161	129 – 193
Roche / Hitachi cobas cSystems	mg/dL	69.0	61.8 – 76.3	114	103 – 125	156	141 – 170
Siemens Atellica Solution (AAT) (CH)	mg/dL	57.8	48.9 – 66.6	110	97.7 – 123	156	140 – 172
Siemens BN Series Nephelometers	mg/dL	74.7	52.5 – 96.9	127	97.9 – 156	179	143 – 215
Siemens Dimension Vista Systems	mg/dL	71.3	61.4 – 81.1	129	109 – 149	179	151 – 207
ALPHA 2-MACROGLOBULIN							
Beckman Coulter IMMAGE	mg/dL	101	79.2 – 122	258	197 – 318	417	315 – 518
Binding Site Optilite (3)	mg/dL	108	86.4 – 130	268	214 – 321	409	327 – 491
Binding Site SPAPlus (3)	mg/dL	108	86.4 – 130	268	214 – 321	409	327 – 491
Siemens BN Series Nephelometers	mg/dL	102	85.1 – 119	262	225 – 298	409	354 – 464
ALPHA-1-ACID GLYCOPROTEIN							
Abbott Alinity c Analyzer	mg/dL	42.1	38.1 – 46.1	66.0	61.2 – 70.8	86.0	80.5 – 91.5
Beckman Coulter IMMAGE	mg/dL	41.1	34.0 – 48.2	65.1	53.6 – 76.6	89.4	73.4 – 105
Binding Site Optilite (3)	mg/dL	44.2	35.4 – 53.0	70.0	56.0 – 84.0	94.9	75.9 – 114
Binding Site SPAPlus (3)	mg/dL	44.2	35.4 – 53.0	70.0	56.0 – 84.0	94.9	75.9 – 114
Siemens ADVIA Chemistry Systems (AAG)	mg/dL	36.3	26.0 – 46.7	69.5	55.3 – 83.7	97.7	80.3 – 115
Siemens Atellica Solution (AAG) (CH)	mg/dL	34.1	26.4 – 41.8	67.5	57.8 – 77.3	96.9	85.3 – 109
Siemens BN Series Nephelometers	mg/dL	41.7	34.2 – 49.2	67.7	55.6 – 79.9	92.3	75.8 – 109
Siemens Dimension Vista Systems	mg/dL	40.0	34.7 – 45.3	65.2	57.5 – 72.8	94.2	83.9 – 105

METHOD (1)

	Units	Level 1 - 68981		Level 2 - 68982 (2)		Level 3 - 68983 (2)	
		Mean	Range	Mean	Range	Mean	Range
ANTI-CYCLIC CITRULLINATED PEPTIDE (ANTI-CCP)							
Abbott Alinity i Analyzer	U/mL	1.53	<0.500 – 2.81	25.0	21.0 – 29.0	43.0	36.8 – 49.2
Abbott ARCHITECT iSystems	U/mL	1.35	<0.500 – 2.35	22.1	17.0 – 27.2	39.1	30.6 – 47.7
Bio-Rad BioPlex 2200 (3)	U/mL	2.00	1.30 – 2.70	128	101 – 155	217	168 – 266
Roche Elecsys/E170/cobas e Systems	U/mL	<7.00		16.8	11.8 – 21.7	34.1	27.3 – 41.0
Siemens ADVIA Centaur CP (aCCP)	U/mL	0.848	<0.400 – 1.89	26.6	21.9 – 31.3	46.1	38.5 – 53.6
Siemens ADVIA Centaur Systems (aCCP)	U/mL	1.18	<0.400 – 2.26	30.3	25.1 – 35.5	50.6	42.7 – 58.5
Siemens Atellica Solution (aCCP) (IM)	U/mL	0.862	<0.540 – 1.90	28.5	23.5 – 33.5	49.5	41.6 – 57.4
Siemens IMMULITE 2000/2000 XPi	U/mL	<1.50		16.0	10.7 – 21.2	26.5	20.0 – 33.0
ANTISTREPTOLYSIN-O							
Abbott Alinity c Analyzer	IU/mL	69.1	56.9 – 81.2	118	103 – 133	246	225 – 267
Abbott ARCHITECT cSystems (Biokit)	IU/mL	64.9	50.8 – 78.9	111	94.3 – 128	225	201 – 248
Beckman Coulter AU Systems	IU/mL		<100 – 104	152	124 – 180	339	297 – 380
Beckman Coulter IMMAGE	IU/mL	58.9	48.3 – 69.4	90.3	72.4 – 108	188	149 – 228
Beckman Coulter Synchron/UniCel DxC Series	IU/mL	§		§		§	
Binding Site Optilite (3)	IU/mL	95.2	76.1 – 114	169	135 – 202	351	280 – 421
Binding Site SPAPlus (3)	IU/mL	95.2	76.1 – 114	169	135 – 202	351	281 – 421
Roche / Hitachi cobas cSystems (ASLOT)	IU/mL	88.9	74.8 – 103	161	137 – 185	341	292 – 390
Siemens ADVIA Chemistry Systems (ASO_2)	IU/mL	93.3	68.8 – 118	171	139 – 202	375	325 – 425
Siemens Atellica Solution (ASO_2) (CH)	IU/mL	89.4	71.3 – 108	167	142 – 192	368	325 – 411
Siemens BN Series Nephelometers	IU/mL	95.4	72.4 – 118	158	124 – 192	330	265 – 394
Siemens Dimension Vista Systems	IU/mL	87.2	71.2 – 103	149	125 – 173	318	272 – 364
APOLIPOPROTEIN A-I							
Abbott Alinity c Analyzer	mg/dL	89.8	82.7 – 96.9	181	166 – 195	270	248 – 292
Beckman Coulter IMMAGE	mg/dL	84.6	66.4 – 103	174	140 – 208	270	219 – 321
Roche / Hitachi cobas cSystems	mg/dL	81.8	70.2 – 93.5	172	153 – 191	253	227 – 279
Siemens ADVIA Chemistry Systems (APOA1)	mg/dL	80.2	60.3 – 100	174	130 – 218	251	186 – 316
Siemens Atellica Solution (APO A1) (CH)	mg/dL	77.2	62.5 – 91.8	157	131 – 184	>200	
Siemens BN Series Nephelometers	mg/dL	84.0	67.9 – 100	169	140 – 199	244	203 – 285
Siemens Dimension Vista Systems	mg/dL	82.5	71.4 – 93.7	173	150 – 195	246	214 – 278
APOLIPOPROTEIN B							
Abbott Alinity c Analyzer	mg/dL	42.3	38.2 – 46.3	104	94.4 – 113	160	145 – 174
Beckman Coulter IMMAGE	mg/dL	36.1	<35.0 – 43.1	100	81.8 – 119	157	128 – 186
Roche / Hitachi cobas cSystems	mg/dL	38.9	31.2 – 46.7	95.9	83.9 – 108	147	131 – 163
Siemens ADVIA Chemistry Systems (APOB)	mg/dL	37.1	24.3 – 50.0	92.1	68.9 – 115	143	110 – 176
Siemens Atellica Solution (APO B) (CH)	mg/dL	34.6	25.2 – 44.0	83.6	68.3 – 98.9	125	105 – 146
Siemens BN Series Nephelometers	mg/dL	38.8	30.4 – 47.2	93.6	77.5 – 110	140	118 – 163
Siemens Dimension Vista Systems	mg/dL	35.8	29.8 – 41.7	90.0	79.4 – 101	135	120 – 149
BETA-2-MICROGLOBULIN							
Abbott Alinity c Analyzer	mg/dL	0.091	0.082 – 0.100	0.214	0.196 – 0.231	0.351	0.324 – 0.377
Binding Site Optilite (3)	mg/dL	0.102	0.082 – 0.122	0.235	0.188 – 0.282	0.350	0.280 – 0.420
Binding Site SPAPlus (3)	mg/dL	0.081	0.065 – 0.097	0.186	0.149 – 0.223	0.282	0.226 – 0.339
DAKO Human Serum Beta-2-Microglobulin (3)	mg/dL	0.101	0.091 – 0.111	0.258	0.232 – 0.284	0.439	0.395 – 0.483
Roche / Hitachi cobas cSystems	mg/L	0.994	0.790 – 1.20	2.13	1.78 – 2.47	3.32	2.83 – 3.80
Siemens ADVIA Chemistry Systems (B2M)	mg/dL	0.085	0.057 – 0.114	0.211	0.162 – 0.261	0.368	0.296 – 0.441
Siemens Atellica Solution (B2M) (CH)	mg/dL	0.076	0.057 – 0.095	0.196	0.163 – 0.228	0.348	0.298 – 0.398
Siemens BN Series Nephelometers	mg/dL	0.084	<0.070 – 0.103	0.201	0.164 – 0.238	0.336	0.278 – 0.394
Siemens Dimension Vista Systems (4)	mg/dL	0.084	0.072 – 0.102	0.197	0.166 – 0.227	0.330	0.285 – 0.375
Siemens IMMULITE 2000/2000 XPi	mg/dL	0.101	0.066 – 0.136	0.225	0.152 – 0.297	0.377	0.258 – 0.497

METHOD (1)

	Units	Level 1 - 68981		Level 2 - 68982 (2)		Level 3 - 68983 (2)	
		Mean	Range	Mean	Range	Mean	Range
C1 INHIBITOR							
Binding Site Optilite (3)	mg/dL	18.5	14.8 – 22.2	34.5	27.6 – 41.4	54.3	43.4 – 65.1
Binding Site SPAPlus (3)	mg/dL	15.7	12.5 – 18.8	32.2	25.8 – 38.7	47.9	38.3 – 57.4
Siemens BN Series Nephelometers	mg/dL	16.6	12.8 – 20.4	34.8	28.5 – 41.0	50.4	41.9 – 58.8
CERULOPLASMIN							
Abbott Alinity c Analyzer	mg/dL	21.1	17.9 – 24.4	36.9	32.3 – 41.4	49.1	43.6 – 54.7
Beckman Coulter IMMAGE	mg/dL	17.2	13.9 – 20.5	33.8	26.1 – 41.5	49.8	37.9 – 61.7
Binding Site Optilite (3)	mg/L	148	118 – 177	291	233 – 350	429	343 – 515
Binding Site SPAPlus (3)	mg/L	148	118 – 177	291	233 – 350	429	343 – 515
Roche / Hitachi cobas cSystems	mg/dL	13.7	11.6 – 15.9	26.4	22.4 – 30.4	38.6	32.9 – 44.4
Siemens ADVIA Chemistry Systems (Sentinel) (3)	mg/dL	22.0	17.6 – 26.4	39.3	31.4 – 47.2	53.5	42.8 – 64.2
Siemens Atellica Solution (Cerul) (CH) (3)	mg/dL	19.8	15.8 – 23.8	36.5	29.2 – 43.8	48.9	39.2 – 58.7
Siemens BN Series Nephelometers	mg/dL	17.6	14.2 – 21.0	33.5	26.8 – 40.2	48.0	38.2 – 57.7
Siemens Dimension Vista Systems	mg/dL	17.5	14.5 – 20.5	31.5	26.2 – 36.8	43.8	36.5 – 51.1
COMPLEMENT C3							
Abbott Alinity c Analyzer	mg/dL	70.1	62.6 – 77.6	153	139 – 168	230	209 – 252
Abbott ARCHITECT cSystems	mg/dL	72.5	64.8 – 80.2	163	148 – 178	241	219 – 263
Beckman Coulter AU Systems	mg/dL	80.6	67.5 – 93.7	165	144 – 187	244	214 – 274
Beckman Coulter IMMAGE	mg/dL	65.6	55.8 – 75.4	147	122 – 171	219	181 – 257
Beckman Coulter Synchron/UniCel DxC Series	mg/dL	§		§		§	
Binding Site Optilite (3)	mg/dL	77.6	62.1 – 93.1	161	129 – 193	239	191 – 287
Binding Site SPAPlus (3)	mg/dL	77.6	62.1 – 93.1	161	129 – 193	239	191 – 287
Roche / Hitachi cobas cSystems	mg/dL	77.4	68.7 – 86.0	168	148 – 187	245	216 – 274
Siemens ADVIA Chemistry Systems (C3)	mg/dL	72.7	62.2 – 83.2	159	139 – 179	241	212 – 270
Siemens Atellica Solution (C3) (CH)	mg/dL	69.7	59.8 – 79.5	153	134 – 171	228	202 – 255
Siemens BN Series Nephelometers	mg/dL	77.1	63.7 – 90.6	167	135 – 199	249	200 – 298
Siemens Dimension Series	mg/dL	74.2	60.4 – 88.1	164	141 – 187	244	212 – 275
Siemens Dimension Vista Systems	mg/dL	71.9	62.0 – 81.8	153	135 – 172	235	208 – 262
COMPLEMENT C4							
Abbott Alinity c Analyzer	mg/dL	14.8	12.7 – 16.9	33.3	30.0 – 36.6	49.1	44.8 – 53.4
Abbott ARCHITECT cSystems	mg/dL	14.6	12.5 – 16.7	34.1	30.5 – 37.7	50.4	45.6 – 55.2
Beckman Coulter AU Systems	mg/dL	15.5	12.1 – 18.9	37.1	31.8 – 42.3	54.3	47.6 – 61.1
Beckman Coulter IMMAGE	mg/dL	15.6	12.8 – 18.3	36.3	28.9 – 43.6	56.4	44.5 – 68.2
Beckman Coulter Synchron/UniCel DxC Series	mg/dL	§		§		§	
Binding Site Optilite (3)	mg/dL	15.0	12.0 – 18.0	32.5	26.0 – 39.0	49.0	39.2 – 58.8
Binding Site SPAPlus (3)	mg/dL	15.0	12.0 – 18.0	32.5	26.0 – 39.0	49.0	39.2 – 58.8
Roche / Hitachi cobas cSystems	mg/dL	13.0	11.3 – 14.7	30.2	26.1 – 34.3	46.0	39.6 – 52.4
Siemens ADVIA Chemistry Systems (C4)	mg/dL	13.7	11.4 – 16.0	32.7	28.2 – 37.2	49.7	43.1 – 56.2
Siemens Atellica Solution (C4) (CH)	mg/dL	13.3	10.6 – 15.9	32.5	28.2 – 36.9	48.8	43.0 – 54.5
Siemens BN Series Nephelometers	mg/dL	14.3	11.9 – 16.7	32.1	25.5 – 38.7	48.4	37.9 – 58.8
Siemens Dimension Series	mg/dL	15.2	11.2 – 19.1	33.1	27.8 – 38.4	48.5	42.1 – 54.9
Siemens Dimension Vista Systems	mg/dL	15.5	13.4 – 17.6	33.5	29.4 – 37.7	51.1	45.0 – 57.3
C-REACTIVE PROTEIN (CRP)							
Abbott Alinity c Analyzer	mg/dL	0.857	0.742 – 0.973	2.86	2.49 – 3.23	4.08	3.56 – 4.61
Abbott ARCHITECT cSystems	mg/dL	0.892	0.792 – 0.992	2.97	2.68 – 3.26	4.30	3.88 – 4.71
Abbott ARCHITECT cSystems CRP Vario (MULTIGENT)-Sentinel (3)	mg/dL	0.869	0.696 – 1.04	2.90	2.32 – 3.48	4.15	3.32 – 4.98
Beckman Coulter AU Systems (OSR 6199)	mg/dL	0.881	0.659 – 1.10	2.63	2.13 – 3.13	4.11	3.37 – 4.85
Beckman Coulter IMMAGE	mg/dL	0.941	0.789 – 1.09	2.75	2.12 – 3.38	4.62	3.50 – 5.73

METHOD (1)

	Units	Level 1 - 68981		Level 2 - 68982 (2)		Level 3 - 68983 (2)	
		Mean	Range	Mean	Range	Mean	Range
C-REACTIVE PROTEIN (CRP) (continued)							
Beckman Coulter Synchron/UniCel DxC Series (CRP) (REF 465131)	mg/dL	0.710	<0.500 – 0.943	2.76	2.24 – 3.28	4.58	3.80 – 5.36
Ortho Vitros Microslide Series	mg/dL	0.888	<0.500 – 1.45	2.50	1.81 – 3.20	3.06	2.32 – 3.81
Roche / Hitachi cobas cSystems (CRP4)	mg/dL	0.780	0.628 – 0.932	2.55	2.13 – 2.98	3.85	3.22 – 4.47
Roche / Hitachi cobas cSystems (CRPL3)	mg/dL	§		§		§	
Roche / Hitachi cobas cSystems (CRPLX)	mg/dL	§		§		§	
Roche / Hitachi Cobas cSystems (CRPL3 restand)	mg/dL	§		§		§	
Roche cobas INTEGRA (CRPLX)	mg/dL	0.824	0.693 – 0.955	2.72	2.32 – 3.12	4.03	3.44 – 4.61
Siemens ADVIA Chemistry Systems (CRP_2)	mg/dL	§		§		§	
Siemens ADVIA Chemistry Systems (wrCRP)	mg/dL	0.997	0.802 – 1.19	2.69	2.33 – 3.05	3.81	3.34 – 4.28
Siemens Atellica Solution (CRP_2) (CH)	mg/dL	0.933	0.706 – 1.16	2.92	2.44 – 3.39	3.95	3.35 – 4.55
Siemens Atellica Solution (wrCRP) (CH)	mg/dL	0.961	0.728 – 1.19	2.68	2.23 – 3.14	3.77	3.18 – 4.36
Siemens Dimension Series (CRP) (DF37)	mg/dL	0.744	0.327 – 1.16	3.28	2.33 – 4.22	4.77	3.49 – 6.04
Siemens Dimension Series (RCRP) (DF34)	mg/dL	0.907	0.459 – 1.35	2.82	1.97 – 3.66	3.98	2.88 – 5.08
Siemens Dimension Vista Systems	mg/dL	0.785	0.627 – 0.942	2.61	2.20 – 3.02	3.87	3.28 – 4.46
C-REACTIVE PROTEIN (HSCRIP)							
Beckman Coulter Synchron/UniCel DxC Series (hsCRP)	mg/dL	§		§		§	
Beckman IMMAGE (CRPH)	mg/dL	§		§		§	
Roche / Hitachi cobas cSystems (CRPHS)	mg/dL	0.855	0.579 – 1.13	3.30	1.74 – 4.85	4.83	2.48 – 7.19
Siemens ADVIA Chemistry Systems (hsCRP)	mg/dL	0.830	0.721 – 0.938	2.58	2.29 – 2.87	3.98	3.55 – 4.41
Siemens Atellica Solution (hsCRP) (CH)	mg/L	7.82	6.90 – 8.74	24.2	21.6 – 26.8	35.8	32.1 – 39.6
Siemens Dimension Vista Systems →	mg/dL	0.872	0.713 – 1.03	2.52	2.13 – 2.91	3.88	3.30 – 4.46
Wiener Lab CMD Series (3)	mg/dL	0.890	0.690 – 1.08	2.77	2.16 – 3.38	4.10	3.20 – 5.00
CYSTATIN C							
Binding Site Optilite (3)	mg/L	<0.400		0.506	0.404 – 0.607	0.697	0.558 – 0.837
Binding Site SPAPlus (3)	mg/L	0.466	<0.400 – 0.559	0.673	0.538 – 0.808	0.836	0.669 – 1.00
DAKO Cystatin C Immunoparticles (3)	mg/L	<0.395		0.581	0.523 – 0.639	0.793	0.714 – 0.872
Roche / Hitachi cobas cSystems (Gen. 2)	mg/L	0.468	<0.400 – 0.579	0.677	0.554 – 0.800	0.890	0.754 – 1.03
Siemens ADVIA Chemistry Systems (CYSC)	mg/L	§		§		§	
Siemens ADVIA Chemistry Systems (CYSC_2) (IFCC)	mg/L	0.457	0.344 – 0.570	0.668	0.534 – 0.803	0.897	0.743 – 1.05
Siemens Atellica Solution (CYSC_2) (CH)	mg/L	0.432	0.327 – 0.536	0.620	0.473 – 0.767	0.845	0.646 – 1.04
Siemens BN Series Nephelometers	mg/L	0.391	0.298 – 0.484	0.565	0.434 – 0.696	0.760	0.585 – 0.934
Siemens Dimension Vista Systems	mg/dL	0.034	0.026 – 0.042	0.052	0.043 – 0.061	0.070	0.060 – 0.080
Tosoh ST AIA-PACK (3)	mg/L	0.400	0.280 – 0.520	0.590	0.410 – 0.770	0.800	0.560 – 1.04
FERRITIN							
Abbott Alinity i Analyzer	ng/mL	30.5	25.8 – 35.2	219	180 – 258	400	328 – 472
Abbott ARCHITECT iSystems	ng/mL	36.0	28.9 – 43.1	224	182 – 266	403	328 – 478
Beckman Coulter AU Systems (OSR 61203)	ng/mL	35.2	25.8 – 44.7	153	130 – 176	255	221 – 289
Roche / Hitachi Cobas cSystems (Gen. 4 restand)	ng/mL	44.0	37.6 – 50.5	178	159 – 196	300	270 – 331
Roche / Hitachi cobas cSystems (Gen. 4)	ng/mL	§		§		§	
Roche Elecsys/E170/Cobas e Systems (ECLIA)	ng/mL	40.5	34.0 – 47.0	188	156 – 220	317	263 – 372
Siemens ADVIA Centaur CP (FER)	ng/mL	25.8	21.4 – 30.3	141	118 – 164	245	206 – 285
Siemens ADVIA Centaur Systems (FER)	ng/mL	26.9	22.3 – 31.5	157	132 – 183	273	229 – 317
Siemens ADVIA Chemistry Systems (FRT)	ng/mL	33.1	25.9 – 40.3	146	122 – 170	246	206 – 285
Siemens Atellica Solution (FER) (IM)	ng/mL	25.7	21.3 – 30.1	138	116 – 161	235	197 – 273
Siemens Dimension Series	ng/mL	38.1	32.2 – 44.0	177	153 – 202	307	265 – 349
Siemens Dimension Vista Systems	ng/mL	24.8	22.2 – 27.4	127	112 – 143	217	190 – 245
Siemens IMMULITE 2000/2000 XPi	ng/mL	36.5	30.4 – 42.7	163	137 – 190	279	234 – 324

METHOD (1)

	Units	Level 1 - 68981		Level 2 - 68982 (2)		Level 3 - 68983 (2)	
		Mean	Range	Mean	Range	Mean	Range
HAPTOGLOBIN							
Abbott Alinity c Analyzer	mg/dL	65.2	58.9 – 71.4	146	131 – 160	222	200 – 244
Abbott ARCHITECT cSystems	mg/dL	64.6	59.0 – 70.3	148	134 – 162	223	202 – 243
Beckman Coulter AU Systems	mg/dL	65.3	56.9 – 73.7	141	125 – 156	211	189 – 233
Beckman Coulter IMMAGE	mg/dL	60.9	51.5 – 70.2	145	126 – 164	217	190 – 244
Beckman Coulter Synchron/UniCel DxC Series	mg/dL	§		§		§	
Binding Site Optilite (3)	mg/dL	60.8	48.6 – 72.9	136	109 – 163	207	165 – 248
Binding Site SPAPlus (3)	mg/dL	70.5	56.4 – 84.6	141	113 – 169	204	163 – 244
Roche / Hitachi cobas cSystems	mg/dL	63.9	58.2 – 69.5	143	132 – 153	220	205 – 235
Siemens ADVIA Chemistry Systems (HAPT)	mg/dL	61.9	52.1 – 71.6	138	113 – 163	211	171 – 251
Siemens Atellica Solution (Hapt) (CH)	mg/dL	62.9	54.5 – 71.3	140	125 – 156	212	190 – 234
Siemens BN Series Nephelometers	mg/dL	62.5	50.0 – 75.0	143	112 – 175	231	178 – 284
Siemens Dimension Vista Systems	mg/dL	63.5	54.6 – 72.5	145	127 – 163	223	196 – 250
IGG SUBCLASS 1							
Binding Site Optilite (3)	mg/dL	431	345 – 517	787	629 – 944	1091	873 – 1309
Binding Site SPAPlus (3)	mg/dL	431	345 – 517	787	629 – 944	1091	873 – 1309
Siemens BN Series Nephelometers	mg/dL	577	441 – 713	997	802 – 1192	1354	1107 – 1601
Siemens BN Series Nephelometers (The Binding Site) (3)	mg/dL	447	358 – 536	820	660 – 984	1138	910 – 1366
IGG SUBCLASS 2							
Binding Site Optilite (3)	mg/dL	251	201 – 301	459	367 – 550	635	508 – 762
Binding Site SPAPlus (3)	mg/dL	251	201 – 301	459	367 – 550	635	508 – 762
Siemens BN Series Nephelometers	mg/dL	243	183 – 303	449	366 – 533	658	549 – 768
Siemens BN Series Nephelometers (The Binding Site) (3)	mg/dL	252	201 – 302	449	360 – 539	624	499 – 749
IGG SUBCLASS 3							
Binding Site Optilite (3)	mg/dL	41.3	33.1 – 49.6	77.4	61.9 – 92.8	106	84.5 – 127
Binding Site SPAPlus (3)	mg/dL	41.3	33.1 – 49.6	77.4	61.9 – 92.8	106	84.5 – 127
Siemens BN Series Nephelometers	mg/dL	23.5	18.3 – 28.7	44.4	35.8 – 53.0	61.4	50.0 – 72.7
Siemens BN Series Nephelometers (The Binding Site) (3)	mg/dL	40.0	32.0 – 48.0	73.0	59.0 – 88.0	96.0	77.0 – 115
IGG SUBCLASS 4							
Binding Site Optilite (3)	mg/dL	24.2	19.4 – 29.0	42.7	34.1 – 51.2	59.3	47.4 – 71.2
Binding Site SPAPlus (3)	mg/dL	24.2	19.4 – 29.0	42.7	34.1 – 51.2	59.3	47.4 – 71.2
Siemens BN Series Nephelometers	mg/dL	34.7	26.8 – 42.5	64.0	51.3 – 76.7	95.4	77.4 – 113
Siemens BN Series Nephelometers (The Binding Site) (3)	mg/dL	23.0	18.0 – 27.0	44.0	35.0 – 52.0	61.0	48.0 – 73.0
IMMUNOGLOBULIN A (IGA)							
Abbott Alinity c Analyzer	mg/dL	111	97.5 – 124	234	212 – 256	349	319 – 379
Abbott ARCHITECT cSystems	mg/dL	117	103 – 132	239	217 – 262	353	322 – 383
Beckman Coulter AU Systems (OSR 61171)	mg/dL	116	99.4 – 133	240	210 – 269	348	308 – 388
Beckman Coulter IMMAGE	mg/dL	108	90.1 – 125	249	210 – 287	368	312 – 423
Beckman Coulter IMMAGE (Low Concentration)	mg/dL	110	92.5 – 127	235	200 – 270	349	297 – 400
Beckman Coulter Synchron/UniCel DxC Series	mg/dL	§		§		§	
Binding Site Optilite (3)	mg/dL	105	83.9 – 126	235	188 – 282	352	282 – 422
Binding Site SPAPlus (3)	mg/dL	105	83.9 – 126	235	188 – 282	352	282 – 422
Ortho Vitros Microtip Series	mg/dL	110	91.1 – 129	249	214 – 284	360	312 – 408
Roche / Hitachi cobas cSystems (Gen. 2)	mg/dL	106	93.1 – 118	236	214 – 258	350	320 – 380
Siemens ADVIA Chemistry Systems (IGA_2)	mg/dL	112	97.4 – 127	248	219 – 277	369	327 – 411
Siemens Atellica Solution (Iga_2) (CH)	mg/dL	116	99.8 – 132	251	223 – 279	369	331 – 407
Siemens BN Series Nephelometers	mg/dL	115	95.5 – 135	257	211 – 303	397	324 – 469
Siemens Dimension Series	mg/dL	107	82.0 – 132	246	204 – 288	356	300 – 411
Siemens Dimension Vista Systems	mg/dL	112	97.1 – 126	251	221 – 281	377	333 – 421

METHOD (1)

	Units	Level 1 - 68981		Level 2 - 68982 (2)		Level 3 - 68983 (2)	
		Mean	Range	Mean	Range	Mean	Range
IMMUNOGLOBULIN E (IGE)							
Abbott ARCHITECT cSystems (Biot)k	IU/mL	40.6	19.1 – 62.1	104	78.5 – 129	130	103 – 157
Roche Elecsys / E170 / cobas e Systems	IU/mL	51.1	43.4 – 58.7	130	117 – 144	174	157 – 191
Siemens ADVIA Centaur CP (tIgE)	IU/mL	44.1	28.7 – 59.4	104	79.7 – 127	135	106 – 164
Siemens ADVIA Centaur Systems (tIgE)	IU/mL	42.2	31.5 – 52.9	108	86.6 – 129	138	112 – 164
Siemens Atellica Solution (tIgE) (IM)	IU/mL	42.7	27.5 – 57.9	107	82.8 – 131	141	111 – 171
Siemens Atellica/BN Series Nephelometers	IU/mL	47.7	37.6 – 57.7	118	95.0 – 140	154	125 – 183
Siemens Dimension Vista Systems	IU/mL	50.8	42.0 – 59.6	120	104 – 135	159	140 – 178
Siemens IMMULITE 2000/2000 XPi	IU/mL	47.7	25.6 – 69.7	119	80.8 – 158	159	110 – 208
IMMUNOGLOBULIN G (IGG)							
Abbott Alinity c Analyzer	mg/dL	802	749 – 856	1427	1321 – 1533	2000	1845 – 2155
Abbott ARCHITECT cSystems	mg/dL	826	768 – 884	1469	1347 – 1591	2039	1860 – 2217
Beckman Coulter AU Systems (OSR 61172)	mg/dL	771	697 – 845	1336	1191 – 1480	1791	1589 – 1993
Beckman Coulter IMMAGE	mg/dL	795	672 – 917	1424	1204 – 1644	1971	1665 – 2277
Beckman Coulter Synchron/UniCel DxS Series	mg/dL	§		§		§	
Binding Site Optilite (3)	mg/dL	800	640 – 959	1411	1129 – 1693	1970	1576 – 2364
Binding Site SPAPLUS (3)	mg/dL	800	640 – 959	1411	1129 – 1693	1970	1576 – 2364
Ortho Vitros Microtip Series	mg/dL	837	725 – 950	1498	1278 – 1718	2045	1736 – 2355
Roche / Hitachi cobas cSystems (Gen. 2)	mg/dL	784	706 – 861	1423	1272 – 1574	1999	1781 – 2218
Siemens ADVIA Chemistry Systems (IGG_2)	mg/dL	772	692 – 853	1392	1213 – 1571	1959	1690 – 2228
Siemens Atellica Solution (IgG_2) (CH)	mg/dL	797	710 – 884	1440	1277 – 1603	2009	1778 – 2239
Siemens BN Series Nephelometers	mg/dL	802	673 – 931	1427	1164 – 1689	1940	1568 – 2312
Siemens Dimension Series	mg/dL	828	630 – 1026	1463	1110 – 1815	2039	1546 – 2532
Siemens Dimension Vista Systems	mg/dL	773	680 – 867	1442	1255 – 1629	1968	1707 – 2229
IMMUNOGLOBULIN M (IGM)							
Abbott Alinity c Analyzer	mg/dL	51.8	44.2 – 59.5	127	113 – 140	192	174 – 209
Abbott ARCHITECT cSystems	mg/dL	51.6	41.0 – 62.3	124	108 – 140	188	167 – 208
Beckman Coulter AU Systems (OSR 61173)	mg/dL	52.3	41.4 – 63.2	121	102 – 140	176	150 – 202
Beckman Coulter IMMAGE	mg/dL	53.4	43.4 – 63.4	127	106 – 148	195	164 – 225
Beckman Coulter IMMAGE (Low Concentration)	mg/dL	61.0	49.9 – 72.1	122	102 – 142	175	147 – 203
Beckman Coulter Synchron/UniCel DxS Series	mg/dL	§		§		§	
Binding Site Optilite (3)	mg/dL	55.9	44.7 – 67.1	127	102 – 153	189	151 – 227
Binding Site SPAPLUS (3)	mg/dL	55.9	44.7 – 67.1	127	102 – 153	189	151 – 227
Ortho Vitros Microtip Series	mg/dL	54.9	45.1 – 64.7	131	112 – 150	195	169 – 222
Roche / Hitachi cobas cSystems (Gen. 2)	mg/dL	51.4	42.9 – 59.9	122	109 – 135	184	167 – 201
Siemens ADVIA Chemistry Systems (IGM_2)	mg/dL	52.8	45.0 – 60.6	124	102 – 146	187	153 – 222
Siemens Atellica Solution (IgM_2) (CH)	mg/dL	56.6	46.5 – 66.8	134	117 – 151	197	175 – 220
Siemens BN Series Nephelometers	mg/dL	53.7	44.4 – 63.0	128	104 – 152	193	155 – 230
Siemens Dimension Series	mg/dL	58.1	41.4 – 74.9	128	104 – 153	187	157 – 218
Siemens Dimension Vista Systems	mg/dL	54.9	46.3 – 63.5	126	108 – 144	188	162 – 214
KAPPA LIGHT CHAIN							
Beckman Coulter IMMAGE	mg/dL	658	544 – 772	1184	993 – 1375	1657	1397 – 1918
Siemens BN Series Nephelometers	mg/dL	191	144 – 237	349	273 – 424	502	398 – 605
Siemens Dimension Vista Systems	mg/dL	▲		▲		▲	
LAMBDA LIGHT CHAIN							
Beckman Coulter IMMAGE	mg/dL	342	287 – 397	645	545 – 744	918	778 – 1058
Siemens BN Series Nephelometers	mg/dL	97.7	73.3 – 122	184	142 – 226	258	201 – 314
Siemens Dimension Vista Systems	mg/dL	99.9	84.4 – 115	189	159 – 219	269	226 – 313

METHOD (1)

	Units	Level 1 - 68981		Level 2 - 68982 (2)		Level 3 - 68983 (2)	
		Mean	Range	Mean	Range	Mean	Range
LIPOPROTEIN (A)							
Abbott Alinity c Analyzer	mg/dL	▲		▲		▲	
Abbott ARCHITECT cSystems (Biokit)	mg/dL	§		§		§	
Beckman Coulter IMMAGE	mg/dL	4.17	2.34 – 6.01	10.4	6.72 – 14.1	16.0	10.7 – 21.4
Binding Site SPAPLUS (3)	mg/dL	<7.00		10.6	8.51 – 12.8	15.7	12.6 – 18.9
Siemens ADVIA Chemistry Systems	mg/dL	<10.0		11.9	<10.0 – 15.7	16.7	12.2 – 21.2
Siemens Atellica Solution (LP(a)) (CH)	mg/dL	<10.0		12.6	10.5 – 14.7	18.3	15.9 – 20.7
Siemens BN Series Nephelometers	mg/dL	<3.00		5.92	4.28 – 7.56	9.31	6.77 – 11.9
PREALBUMIN							
Abbott Alinity c Analyzer	mg/dL	13.9	12.4 – 15.3	22.3	19.8 – 24.8	27.7	24.6 – 30.9
Abbott ARCHITECT cSystems	mg/dL	13.6	12.2 – 15.0	21.4	19.3 – 23.6	26.2	23.6 – 28.7
Beckman Coulter AU Systems	mg/dL	▲		▲		▲	
Beckman Coulter IMMAGE	mg/dL	14.1	12.0 – 16.2	23.3	20.0 – 26.7	32.4	27.8 – 37.0
Beckman Coulter Synchron/UniCel DxC Series	mg/dL	§		§		§	
Binding Site Optilite (3)	g/L	0.122	0.098 – 0.147	0.210	0.168 – 0.252	0.288	0.230 – 0.345
Binding Site SPAPLUS (3)	g/L	0.122	0.098 – 0.147	0.210	0.168 – 0.252	0.288	0.230 – 0.345
Ortho Vitros Microtip Series	mg/dL	15.2	13.1 – 17.3	24.4	21.4 – 27.3	33.1	29.3 – 36.9
Roche / Hitachi cobas cSystems	mg/dL	13.0	10.7 – 15.3	22.4	18.7 – 26.1	31.1	26.1 – 36.1
Siemens ADVIA Chemistry Systems (PREALB)	mg/dL	§		§		§	
Siemens Atellica Solution (PreAlb) (CH)	mg/dL	12.3	10.3 – 14.3	22.0	19.0 – 25.1	30.2	26.2 – 34.1
Siemens BN Series Nephelometers	mg/dL	13.5	11.3 – 15.7	22.9	18.3 – 27.5	33.7	26.3 – 41.2
Siemens Dimension Series	mg/dL	15.9	13.8 – 18.0	24.4	21.1 – 27.7	35.0	30.2 – 39.8
Siemens Dimension Vista Systems	mg/dL	13.4	11.1 – 15.6	22.3	17.9 – 26.8	32.5	25.6 – 39.5
PROTEIN SERUM (TOTAL)							
Abbott Alinity c Analyzer	g/dL	3.00	2.74 – 3.26	6.03	5.66 – 6.40	8.80	8.32 – 9.28
Abbott ARCHITECT cSystems	g/dL	2.94	2.56 – 3.33	6.02	5.60 – 6.44	8.81	8.35 – 9.27
Beckman Coulter AU Systems	g/dL	3.33	3.08 – 3.58	6.02	5.66 – 6.37	8.32	7.86 – 8.77
Beckman Coulter Synchron/UniCel DxC Series	g/dL	4.92	4.54 – 5.30	7.73	7.29 – 8.18	10.3	9.79 – 10.8
Ortho Vitros Microslide Series	g/dL	2.77	2.51 – 3.03	4.80	4.47 – 5.14	7.29	6.86 – 7.72
Roche / Hitachi cobas cSystems (Gen. 2)	g/dL	4.00	3.65 – 4.34	6.86	6.36 – 7.35	9.38	8.76 – 10.0
Roche cobas INTEGRA (Biuret, serum blank, end point)	g/dL	3.64	3.42 – 3.87	6.45	6.06 – 6.85	8.76	8.23 – 9.30
Siemens ADVIA Chemistry Systems (TP, TP_c)	g/dL	4.56	4.28 – 4.83	7.25	6.85 – 7.65	9.69	9.18 – 10.2
Siemens Atellica Solution (TP) (CH)	g/dL	4.40	4.03 – 4.77	6.93	6.51 – 7.36	9.22	8.74 – 9.70
Siemens Dimension Series	g/dL	3.89	3.49 – 4.30	6.81	6.39 – 7.23	9.33	8.89 – 9.77
Siemens Dimension Vista Systems	g/dL	3.99	3.59 – 4.39	6.85	6.43 – 7.26	9.24	8.81 – 9.67
RHEUMATOID FACTOR							
Abbott ARCHITECT cSystems (REF 8G66)	IU/mL	23.6	16.1 – 31.1	38.0	29.1 – 46.9	47.8	37.9 – 57.8
Beckman Coulter AU Systems	IU/mL	23.0	16.7 – 29.4	37.3	29.2 – 45.5	46.7	37.3 – 56.0
Beckman Coulter IMMAGE	IU/mL		<20.0 – 20.2	29.7	<20.0 – 39.7	40.1	25.8 – 54.4
Ortho Vitros Microtip Series	IU/mL	20.0	15.4 – 24.7	30.4	24.4 – 36.3	37.9	31.0 – 44.8
Roche / Hitachi cobas cSystems (Gen. 2)	IU/mL	21.3	18.1 – 24.6	33.9	29.2 – 38.6	42.7	37.0 – 48.5
Siemens ADVIA Chemistry Systems (RF)	IU/mL	23.3	21.1 – 25.5	36.3	27.4 – 45.3	46.7	31.7 – 61.6
Siemens Atellica Solution (RF) (CH)	IU/mL	23.2	18.2 – 28.1	35.1	28.6 – 41.6	44.7	36.9 – 52.4
Siemens BN Series Nephelometers	IU/mL	▲		▲		▲	
Siemens Dimension Vista Systems	IU/mL	15.1	10.6 – 19.7	24.6	17.8 – 31.4	32.1	23.5 – 40.7
TRANSFERRIN							
Abbott ARCHITECT cSystems	mg/dL	147	135 – 159	246	227 – 265	338	313 – 363
Beckman Coulter AU Systems	mg/dL	146	129 – 163	241	217 – 265	334	303 – 365
Beckman Coulter IMMAGE	mg/dL	132	104 – 161	229	185 – 273	329	269 – 389

METHOD (1)

	Units	Level 1 - 68981		Level 2 - 68982 (2)		Level 3 - 68983 (2)	
		Mean	Range	Mean	Range	Mean	Range
TRANSFERRIN (continued)							
Beckman Coulter Synchron/UniCel DxC Series	mg/dL	§		§		§	
Binding Site Optilite (3)	mg/dL	139	111 – 166	230	184 – 276	315	252 – 378
Binding Site SPAPLUS (3)	mg/dL	139	111 – 166	230	184 – 276	315	252 – 378
Ortho Vitros Microtip Series	mg/dL	149	125 – 172	253	214 – 293	341	288 – 393
Roche / Hitachi cobas cSystems (Gen. 2)	mg/dL	148	135 – 160	248	225 – 272	345	311 – 380
Siemens ADVIA Chemistry Systems (TRF)	mg/dL	149	130 – 168	242	213 – 271	334	294 – 373
Siemens Atellica Solution (Trf) (CH)	mg/dL	147	130 – 163	239	214 – 264	320	287 – 352
Siemens BN Series Nephelometers	mg/dL	144	116 – 173	247	194 – 300	337	262 – 412
Siemens Dimension Series	mg/dL	144	127 – 162	239	210 – 268	327	287 – 367
Siemens Dimension Vista Systems	mg/dL	▲		▲		▲	
Wiener Lab CMD Series (3)	mg/dL	124	106 – 143	219	186 – 252	304	258 – 349

FOOTNOTES

- (1) All footnotes may not apply to your custom selected data chart.
- (2) A dilution should be made prior to running those tests where the value listed exceeds the highest standard.
- (3) The assigned values were determined using the reagent and/or instrument manufacturer's protocol and may not represent $\pm 3SD$ ranges.
- (4) Analyte may recover outside the assay analytical range.

▲ Data is not available at this time. Please inquire.

§ The data required to establish the means and acceptable ranges for this assay were not obtained due to limited assignment participation. If your facility is interested in participating in the Value Assignment Program for this assay, please contact your local Bio-Rad office.