

	Reference range	P-1	P-2	P-3	P-4	P-5	P-6
WBC (K cells/uL)	6.85-12.84	8.85	6.92	18.6	16.1	10.09	17.27
ANC (K cells/uL)	2.22-7.11	2.04 L	3.6	14.72 H	11.4	3.36	13.3 H
ALC (K cells/uL)	1.88-5.39	5.22	2.7	2.24	0.97 L	4.46	2.26
% Polys	16-54	23	52	79	71	33	77
% Lymphs	16-68	59	39	12	6	44	13
<b>IMMUNOGLOBULINS</b>							
IgG	200-1200	209	285	447	611	588	659
IgA	8-90	12	95	19		40	50
IgM	10-90	56	86	88		18	92 H
IgE	0-30			<5			
<b>LYMPHOCYTES</b>							
CD3(%)	49-84		28 L	70		74 (f)	62
CD3 Abs (cells/uL)	2500-5600		503 C	3,216		2,075 L	1,875 L
CD3/CD4 (%)	31-56		19 L	45		31	35
CD3/CD4 Abs (cells/ uL)	1600-4000		343 C	2,102		880 L	1,051 L
CD3/CD8 (%)	12-24		9 L	23		41 H	26 H
CD3/CD8 Abs (cells/ uL)	500-1700		163 C	1,098		1,167	804
CD3-/CD16 or 65 (%)	3-15		6	10		9	6
CD3-/CD16 or 65 Abs (cells/uL)	160-1100		105 L	447		256	194
CD19 (%)	11-41		64 H	18		16	31
CD19 (Abs) (cell/uL)	430-3000		1,105	800		462	939
CD4/CD8 ratio	1.3-6.3		2.1	1.91		0.75	1.31
T-sum (%)							
<b>T CELL SUBSETS</b>							
TEMRA CD4+CD45RA+CCR7- T cells (%)	0.1-1.9						
Naïve CD4+ CD45RA+ CCR7+ T cells (%)	76.7-91.4						
Eff Mem CD4+ CD45RA- CCR7- T cells (%)	1.1-5.3						
Central Mem CD4+ CD45RA- CCR7+ T cells (%)	6.7-15.6						
TEMRA CD8+CD45RA+CCR7- T cells (%)	1.5-22.7						
Naïve CD8+ CD45RA+ CCR7+ T cells (%)	62.1-94						
Eff Mem CD8+ CD45RA- CCR7- T cells (%)	1.3-19.5						
Central Mem CD8+ CD45RA- CCR7+ T cells (%)	0.5-5.6						
Naïve CD3+CD4+ (%)	50-85					75.2 (f)	78.8 (f)
Memory CD3+CD4+ (%)	15-50					24.8	21.2
Naïve CD3+CD8+ (%)	50-85					46.1	93.9
Memory CD3+CD8+ (%)	15-50					53.9	6.1
CD31+ Recent Thymic Emigrants (%)	59.7-82.4						
<b>B CELL SUBSETS</b>							
Switched mem B cells (IgD- CD27+) (%)	1.6-7						2.10 (f)
Unswitched mem B cells (IgD+ CD27+) (%)	2.8-7.4						5.9
Naïve IgD+ CD27- B cells (%)	85.5-93.4						91.2
<b>MITOGENS</b>							
Con A proliferation (CPM)	65,699-239,344		1452 L			60572 L	
PHA proliferation (CPM)	96,090-358,179		166,249			7,790	77,756
Anti-CD3 proliferation (CPM)	62,927-217,761						
T cell mitogen Backgrnd (CPM)	204-2104					443 (f)	219 (f)
<b>NEUTROPHILS</b>							
Neutrophil OI	>100						
% Positive PMNs	>95						

	Reference range	P-7	P-8	P-9	P-10	P-11	P-12	P-13
WBC (K cells/uL)	6.85-12.84	7.27	6.85	6.33 L	7.01	9.74	6.38 L	11.92
ANC (K cells/uL)	2.22-7.11	5.44	4.36	4.11	2.66	4.19	0.82 L	6.81
ALC (K cells/uL)	1.88-5.39	1.29 L	1.92	1.57 L	2.14	3.8	4.86	2.8
% Polys	16-54	75	64	65	38	43	13	57
% Lymphs	16-68	18	28	25	31	39	76	24
<b>IMMUNOGLOBULINS</b>								
IgG	200-1200	509	443	226 L	313	<75		245 L
IgA	8-90	113 H	72	57 H	45	17		38
IgM	10-90	48	14 L	80 H	37	2		27
IgE	0-30	2	5	65 H				
<b>LYMPHOCYTES</b>								
CD3(%)	49-84	74	55	45 L	44 L		59	51
CD3 Abs (cells/uL)	2500-5600	2,462	1,969	776 C	732 C		2,574	1,681 L
CD3/CD4 (%)	31-56	50	30 L	31 L	32 L		17 L	24 L
CD3/CD4 Abs (cells/ uL)	1600-4000	1,661	1,050 L	534 C	540 C		735 C	787 C
CD3/CD8 (%)	12-24	23	24	14	11 L		42 H	23
CD3/CD8 Abs (cells/ uL)	500-1700	757	854	246 C	184 C		1,818 H	752
CD3-/CD16 or 65 (%)	3-15	8	7	10	32 H		8	20 H
CD3-/CD16 or 65 Abs (cells/uL)	160-1100	271	245	171	533		346	654
CD19 (%)	11-41	17	36	43 H	20		32	28
CD19 (Abs) (cell/uL)	430-3000	553 L	1,278	756	341		1,395	928
CD4/CD8 ratio	1.3-6.3	2.19	1.23 L	2.17	2.93		0.40 L	1.05 L
T-sum (%)								
<b>T CELL SUBSETS</b>								
TEMRA CD4+CD45RA+CCR7- T cells (%)	0.1-1.9							
Naïve CD4+ CD45RA+ CCR7+ T cells (%)	76.7-91.4							
Eff Mem CD4+ CD45RA- CCR7- T cells (%)	1.1-5.3							
Central Mem CD4+ CD45RA- CCR7+ T cells (%)	6.7-15.6							
TEMRA CD8+CD45RA+CCR7- T cells (%)	1.5-22.7							
Naïve CD8+ CD45RA+ CCR7+ T cells (%)	62.1-94							
Eff Mem CD8+ CD45RA- CCR7- T cells (%)	1.3-19.5							
Central Mem CD8+ CD45RA- CCR7+ T cells (%)	0.5-5.6							
Naïve CD3+CD4+ (%)	50-85					66.6 (f)		
Memory CD3+CD4+ (%)	15-50	81.2 (f)				33.4		
Naïve CD3+CD8+ (%)	50-85	18.8				82.1		
Memory CD3+CD8+ (%)	15-50	74.3				17.9		
CD31+ Recent Thymic Emigrants (%)	59.7-82.4							
<b>B CELL SUBSETS</b>								
Switched mem B cells (IgD- CD27+) (%)	1.6-7							
Unswitched mem B cells (IgD+ CD27+) (%)	2.8-7.4							
Naïve IgD+ CD27- B cells (%)	85.5-93.4							
<b>MITOGENS</b>								
Con A proliferation (CPM)	65,699-239,344							
PHA proliferation (CPM)	96,090-358,179					61,391		
Anti-CD3 proliferation (CPM)	62,927-217,761							
T cell mitogen Backgrnd (CPM)	204-2104					8,722 (f)		
<b>NEUTROPHILS</b>								
Neutrophil OI	>100							406 (f)
% Positive PMNs	>95							100

	Reference range	P-14	P-15	P-16	P-17	P-18
WBC (K cells/uL)	6.85-12.84	2.95 L	5.88 L	15.44	9.52	7.52
ANC (K cells/uL)	2.22-7.11	0.94 L	5.3	7.78 H	8 H	4.6
ALC (K cells/uL)	1.88-5.39	1.74 L	1.49 L	4.15	0.64 L	1.49 L
% Polys	16-54	32	55	50	84	61
% Lymphs	16-68	59	15	27	7	20
<b>IMMUNOGLOBULINS</b>						
IgG	200-1200	404				481
IgA	8-90	38				25
IgM	10-90	65				39
IgE	0-30	13				
<b>LYMPHOCYTES</b>						
CD3(%)	49-84	81	70	62	45 L	25 L
CD3 Abs (cells/uL)	2500-5600	1,649 L	2,221	3,179	353 C	459 C
CD3/CD4 (%)	31-56	59 H	35	44	29 L	17 L
CD3/CD4 Abs (cells/ uL)	1600-4000	1,190 L	1,098 L	2,249	228 (f) C	298 (f) C (c)
CD3/CD8 (%)	12-24	23	32 H	17	12	8 L
CD3/CD8 Abs (cells/ uL)	500-1700	466 L	1,015	858	93 C	136 C
CD3-/CD16 or 65 (%)	3-15	3	8	21 H	26 H	18 H
CD3-/CD16 or 65 Abs (cells/uL)	160-1100	59 C	238	1,074	201	324
CD19 (%)	11-41	15	19	16	25	55 H
CD19 (Abs) (cell/uL)	430-3000	303 L	608 L	847	191 L	982
CD4/CD8 ratio	1.3-6.3	2.55	1.08 L	2.62	2.46	2.19
T-sum (%)		0	3	1	4	1
<b>T CELL SUBSETS</b>						
TEMRA CD4+CD45RA+CCR7- T cells (%)	0.1-1.9	0.3 (f)		1.3 (f)	1.1 (f)	3.1 (f) H
Naïve CD4+ CD45RA+ CCR7+ T cells (%)	76.7-91.4	93.0 H		69.4 L	52.8 L	67.1 L
Eff Mem CD4+ CD45RA- CCR7- T cells (%)	1.1-5.3	1.0 L		10.3 H	16.0 H	11.1 H
Central Mem CD4+ CD45RA- CCR7+ T cells (%)	6.7-15.6	5.6 L		19.0 H	30.0 H	18.7 H
TEMRA CD8+CD45RA+CCR7- T cells (%)	1.5-22.7	0.5 L		0.3 L	3.9	3
Naïve CD8+ CD45RA+ CCR7+ T cells (%)	62.1-94	92		91.8	62.2	92
Eff Mem CD8+ CD45RA- CCR7- T cells (%)	1.3-19.5	0.8 L		1.2 L	30.4 H	2.5
Central Mem CD8+ CD45RA- CCR7+ T cells (%)	0.5-5.6	6.7 H		6.7 H	3.4	2.5
Naïve CD3+CD4+ (%)	50-85	75.7 (f)				
Memory CD3+CD4+ (%)	15-50	24.3				
Naïve CD3+CD8+ (%)	50-85	79				
Memory CD3+CD8+ (%)	15-50	21				
CD31+ Recent Thymic Emigrants (%)	59.7-82.4					32.2 (f) L
<b>B CELL SUBSETS</b>						
Switched mem B cells (IgD- CD27+) (%)	1.6-7	2.60 (f)				
Unswitched mem B cells (IgD+ CD27+) (%)	2.8-7.4	5.6				
Naïve IgD+ CD27- B cells (%)	85.5-93.4	88.8				
<b>MITOGENS</b>						
Con A proliferation (CPM)	65,699-239,344	43174 L		67,760 L		107,238
PHA proliferation (CPM)	96,090-358,179	339,154		167,919		110,574
Anti-CD3 proliferation (CPM)	62,927-217,761	26,986		110,920		584 L
T cell mitogen Backgrnd (CPM)	204-2104	1,007 (f)		1,630 (f)		186 (f) L
<b>NEUTROPHILS</b>						
Neutrophil OI	>100					131 (f)
% Positive PMNs	>95					82

	Reference range	P-19	P-20	P-21	P-22	P-23	P-24
WBC (K cells/uL)	6.85-12.84	12.17	16.41	28.74 H	12.09		13.5
ANC (K cells/uL)	2.22-7.11	5.08	8.44 H	16.5 H	6.2		10.6 H
ALC (K cells/uL)	1.88-5.39	2.32	1.8 L	5 H	3.93		1.2 L
% Polys	16-54	42	51	57 H	51.3		79 H
% Lymphs	16-68	19	11	17	32		9 L
<b>IMMUNOGLOBULINS</b>							
IgG	200-1200				269 L	<75	
IgA	8-90				58 H		
IgM	10-90				76 H		
IgE	0-30						
<b>LYMPHOCYTES</b>							
CD3(%)	49-84	86 H	73	55	69		77
CD3 Abs (cells/uL)	2500-5600	2,740	2,546	1,761 L	2,422 L		1,704 L
CD3/CD4 (%)	31-56	70 H	43	42	48		56
CD3/CD4 Abs (cells/ uL)	1600-4000	2,221	1,480 L	1,333 L	1,677		1,240 L
CD3/CD8 (%)	12-24	16	30 H	14	19		19
CD3/CD8 Abs (cells/ uL)	500-1700	512	1,054	439 L	663		416 L
CD3-/CD16 or 65 (%)	3-15	3 L	16	7	6		13
CD3-/CD16 or 65 Abs (cells/uL)	160-1100	109 L	545	211	227		280
CD19 (%)	11-41	7	10	34 H	23		9 L
CD19 (Abs) (cell/uL)	430-3000	229 L	345	1,092	810		209 L
CD4/CD8 ratio	1.3-6.3	4.34	1.4	3.03	2.53		2.98
T-sum (%)		0	0.8 (f)	0	2		2
<b>T CELL SUBSETS</b>							
TEMRA CD4+CD45RA+CCR7- T cells (%)	0.1-1.9	2.6 (f) H	74.1 L	2.5 (f) H			6.2 (f) H
Naïve CD4+ CD45RA+ CCR7+ T cells (%)	76.7-91.4	84	10.0 H	73.1 L			85.7
Eff Mem CD4+ CD45RA- CCR7- T cells (%)	1.1-5.3	6.8 H	15.2	9.6 H			3.9
Central Mem CD4+ CD45RA- CCR7+ T cells (%)	6.7-15.6	6.6 L	0.8 L	14.8			4.3 L
TEMRA CD8+CD45RA+CCR7- T cells (%)	1.5-22.7	1.3 L	94.3 H	1.4 L			0.5 L
Naïve CD8+ CD45RA+ CCR7+ T cells (%)	62.1-94	88.2	0.6 L	82.8			96.6 H
Eff Mem CD8+ CD45RA- CCR7- T cells (%)	1.3-19.5	3.1	4.2	1.7			1.5
Central Mem CD8+ CD45RA- CCR7+ T cells (%)	0.5-5.6	7.3 H		14.0 H			1.3
Naïve CD3+CD4+ (%)	50-85						
Memory CD3+CD4+ (%)	15-50						
Naïve CD3+CD8+ (%)	50-85						
Memory CD3+CD8+ (%)	15-50						
CD31+ Recent Thymic Emigrants (%)	59.7-82.4						
<b>B CELL SUBSETS</b>							
Switched mem B cells (IgD- CD27+) (%)	1.6-7						
Unswitched mem B cells (IgD+ CD27+) (%)	2.8-7.4						
Naïve IgD+ CD27- B cells (%)	85.5-93.4						
<b>MITOGENS</b>							
Con A proliferation (CPM)	65,699-239,344						281,750 H
PHA proliferation (CPM)	96,090-358,179						293,920
Anti-CD3 proliferation (CPM)	62,927-217,761						74,756
T cell mitogen Backgrnd (CPM)	204-2104						383 (f)
<b>NEUTROPHILS</b>							
Neutrophil OI	>100				164 (f)		
% Positive PMNs	>95				63		

	Reference range	P-25	P-26	P-27	P-28	P-29
WBC (K cells/uL)	6.85-12.84	9.26	7.85 L	9.69	12.07	22.53 H
ANC (K cells/uL)	2.22-7.11	3.94	4.86	5.65	8.53 H	7.98 H
ALC (K cells/uL)	1.88-5.39	3.03	0.49 L	1.92	2.12	7.98 H
% Polys	16-54	42.5	61.9	58.4 H	70.7 H	35.4
% Lymphs	16-68	33	6 L	19.8	17.6	35
<b>IMMUNOGLOBULINS</b>						
IgG	200-1200		96 L		368	117 L
IgA	8-90				25	
IgM	10-90				22	
IgE	0-30				5	
<b>LYMPHOCYTES</b>						
CD3(%)	49-84	49	35 L	56	68	60
CD3 Abs (cells/uL)	2500-5600	1,890 L	205 L	1,021 L	2,637	2,714
CD3/CD4 (%)	31-56	32 L	26 L	35	42	50
CD3/CD4 Abs (cells/ uL)	1600-4000	1,238 L	151 (f) C (c)	638 L	1,614	2,243
CD3/CD8 (%)	12-24	17	9 L	18	26 H	10 L
CD3/CD8 Abs (cells/ uL)	500-1700	646	53 L	331 L	989	453 L
CD3-/CD16 or 65 (%)	3-15	7	28 H	14	6	5
CD3-/CD16 or 65 Abs (cells/uL)	160-1100	269	167	259	225	239
CD19 (%)	11-41	41 H	35 H	26	25	33 H
CD19 (Abs) (cell/uL)	430-3000	1,584	203 L	474	960	1,468
CD4/CD8 ratio	1.3-6.3	1.92	2.83	1.93	1.63	4.95
T-sum (%)		0	0	3	1	0
<b>T CELL SUBSETS</b>						
TEMRA CD4+CD45RA+CCR7- T cells (%)	0.1-1.9	2.6 (f) H	2.4 (f) H	1.8 (f)	0.8 (f)	0.5 (f)
Naïve CD4+ CD45RA+ CCR7+ T cells (%)	76.7-91.4	82.4	53.8 L	70.9 L	82.9	64.0 L
Eff Mem CD4+ CD45RA- CCR7- T cells (%)	1.1-5.3	6.2 H	24.5 H	9.4 H	3.7	11.1 H
Central Mem CD4+ CD45RA- CCR7+ T cells (%)	6.7-15.6	8.7	19.2 H	18.0 H	12.6	24.4 H
TEMRA CD8+CD45RA+CCR7- T cells (%)	1.5-22.7	1.5	4.2	1.2 L	0.5 L	0.8 L
Naïve CD8+ CD45RA+ CCR7+ T cells (%)	62.1-94	85.3	83.5	92.3	93.7	78.3
Eff Mem CD8+ CD45RA- CCR7- T cells (%)	1.3-19.5	3.1	9.1	4	0.8 L	2.4
Central Mem CD8+ CD45RA- CCR7+ T cells (%)	0.5-5.6	10.0 H	3.2	2.6	5.1	18.5 H
Naïve CD3+CD4+ (%)	50-85					
Memory CD3+CD4+ (%)	15-50					
Naïve CD3+CD8+ (%)	50-85					
Memory CD3+CD8+ (%)	15-50					
CD31+ Recent Thymic Emigrants (%)	59.7-82.4			33.2 (f) L		
<b>B CELL SUBSETS</b>						
Switched mem B cells (IgD- CD27+) (%)	1.6-7				1.20 (f) L	
Unswitched mem B cells (IgD+ CD27+) (%)	2.8-7.4				2.8	
Naïve IgD+ CD27- B cells (%)	85.5-93.4				95.60 H	
<b>MITOGENS</b>						
Con A proliferation (CPM)	65,699-239,344	184,752				
PHA proliferation (CPM)	96,090-358,179	210,614				
Anti-CD3 proliferation (CPM)	62,927-217,761	6,093 L				
T cell mitogen Backgrnd (CPM)	204-2104	319 (f)				
<b>NEUTROPHILS</b>						
Neutrophil OI	>100				206 (f)	
% Positive PMNs	>95				99	