

**TBNK CELL QUANTITATION WITH ASSESSMENT OF T-CELL FUNCTION
AND PROLIFERATION TO MITOGENS
#89826**

PROFILE INFORMATION:

Unit Code	Reporting Name	Available Separately	Always Performed
9336	T- & B-Cell QN by Flow Cytometry	Yes	Yes
8884	Lymphocyte Proliferation, Mitogens	Yes	Yes

EXPLANATION: This new test contains two existing tests combined to assess global T-cell function

USEFUL FOR:

- Assessing global T-cell function and quantitating lymphocyte subsets in a single orderable test
- This panel is most helpful when evaluating patients with immunodeficiencies, where quantitative decreases in T cells can lead to reduced functional mitogen responses.
- See Individual Unit Codes (9336 and 8884) for additional information.

METHODOLOGY:

- 9336: Fluorescent Flow Cytometry
- 8884: Incorporation of radioactive nucleoside ([3]H-Thymidine) into cellular DNA

SPECIMEN REQUIREMENTS: **Two separate specimens are required** for this test-1 containing EDTA and 1 containing sodium heparin.

Specimens must arrive within 24 hours of draw and by 10 a.m. on Friday. Send specimens Sunday through Thursday only. Collect and package specimens as close to shipping time as possible. Ship specimens priority overnight.

Blood for #9336:

Draw blood in a lavender-top (EDTA) tube(s), and send 4 mL of EDTA whole blood in original VACUTAINER(S). **Do not aliquot.** Forward promptly at ambient temperature. **Specimen cannot be frozen.**

- Note:**
1. **Draw date is required** on request form for processing.
 2. For serial monitoring, draw specimen at the same time of day.

Blood for #8884:

Draw blood in a green-top (sodium heparin) tube(s), and send 15 mL of sodium heparin whole blood in original VACUTAINER(S). (**Lithium heparin is not acceptable.**) **Do not aliquot.** Forward promptly at ambient temperature only.

- Note:**
1. **Draw date, draw time, and ordering physician name are required** on request form for processing.
 2. For serial monitoring, draw specimen at the same time of day.

CAUTIONS:

- This assay is not used for diagnosing lymphocytic malignancies or evaluation of lymphocytosis of unknown etiology. In these situations, #3287 "Leukemia/Lymphoma Immunophenotyping by Flow Cytometry," which includes a hematopathology review, should be ordered.
- The range of proliferative responses observed in healthy, immunologically competent individuals is large.
- Lymphocyte proliferation to lectin mitogens is known to be affected by alcohol, numerous therapeutic drugs (eg, corticosteroids), psychological stressors (eg, anxiety, bereavement, and depression), and acute illnesses (eg, acute viral infections).
- Timing and consistency in timing of blood collection is critical when serially monitoring patients for lymphocyte subsets. See data under Clinical Information.
- Test specimens >24 hours old may give spurious results. Diminished results may be obtained in cultures that contain excess neutrophils or non viable cells.

LIST FEE:

"T- and B-Cell Quantitation by Flow Cytometry": \$399.60

"Lymphocyte Proliferation, Mitogens, Blood": \$491.60

CPT CODE:

"T- and B-Cell Quantitation by Flow Cytometry"

86355/B cells, total count

86356/Total count, CD45

86357/Natural killer (NK) cells, total count

86359/T cells, total count

86360/Absolute CD4/CD8 count with ratio

"Lymphocyte Proliferation, Mitogens, Blood"

86353

ANALYTIC TIME: 11 days

DAY(S) SET-UP:

"T- and B-Cell Quantitation by Flow Cytometry": Monday through Sunday; continuously to 2 p.m.

"Lymphocyte Proliferation, Mitogens, Blood": Monday through Friday

REFERENCE VALUES: As the reference values for these tests are quite extensive, they have not been listed here. Please see the individual unit codes (9336 and 8884) within the test catalog for details.

QUESTIONS: Contact your Mayo Medical Laboratories' Regional Manager or
Shirley Pokorski, Mayo Medical Laboratories' Technologist Support
Telephone: 800-533-1710

TEST DEFINITION

8/3/2009

CODE NAME

89826 T-CELL WITH MITOGEN PANEL

ORDER CODE	EFF DATE	TC	TITLE	CHECKING NORMALS	PRINT NORMALS (# CODED)	PERFORM SITE *
89826 (PROFILE)			T-CELL WITH MITOGEN PANEL			
9336	3/30/2009		T- & B-CELL QN BY FLOW CYTOMETRY			MCR
			TRANSPORT TEMP : AMBIENT <72 HOURS\REFRIG <72 HOURS OK\FROZEN NO			
9336			T- & B-CELL QN BY FLOW CYTOMETRY			
			- - - - -			
3321			CD45 LYMPH COUNT, FLOW			
			UNITS: THOU/UL			
			NO SEX			
			No AGE :		; #NN3321	
			1D TO 17Y :	0.66-4.60	; 0.66-4.60	
			18Y TO 55Y :	0.99-3.15	; 0.99-3.15	
			56Y TO 150Y :	1.00-3.33	; 1.00-3.33	
			MALE			
			No AGE :		; #NN3321	
			1D TO 17Y :	0.66-4.60	; 0.66-4.60	
			18Y TO 55Y :	0.99-3.15	; 0.99-3.15	
			56Y TO 150Y :	1.00-3.33	; 1.00-3.33	
			FEMALE			
			No AGE :		; #NN3321	
			1D TO 17Y :	0.66-4.60	; 0.66-4.60	
			18Y TO 55Y :	0.99-3.15	; 0.99-3.15	
			56Y TO 150Y :	1.00-3.33	; 1.00-3.33	
			- - - - -			
3316			% CD3 (T CELLS)			
			UNITS: %			
			NO SEX			
			No AGE :		; #N3316	
			1D TO 2M :	53-84	; 53-84	
			3M TO 5M :	51-77	; 51-77	
			6M TO 11M :	49-76	; 49-76	

12M TO 23M	:	53-75	;	53-75
24M TO 5Y	:	56-75	;	56-75
6Y TO 11Y	:	60-76	;	60-76
12Y TO 17Y	:	56-84	;	56-84
18Y TO 55Y	:	59-83	;	59-83
56Y TO 150Y	:	49-87	;	49-87

MALE

NO AGE	:		;	#N3316
1D TO 2M	:	53-84	;	53-84
3M TO 5M	:	51-77	;	51-77
6M TO 11M	:	49-76	;	49-76
12M TO 23M	:	53-75	;	53-75
24M TO 5Y	:	56-75	;	56-75
6Y TO 11Y	:	60-76	;	60-76
12Y TO 17Y	:	56-84	;	56-84
18Y TO 55Y	:	59-83	;	59-83
56Y TO 150Y	:	49-87	;	49-87

FEMALE

NO AGE	:		;	#N3316
1D TO 2M	:	53-84	;	53-84
3M TO 5M	:	51-77	;	51-77
6M TO 11M	:	49-76	;	49-76
12M TO 23M	:	53-75	;	53-75
24M TO 5Y	:	56-75	;	56-75
6Y TO 11Y	:	60-76	;	60-76
12Y TO 17Y	:	56-84	;	56-84
18Y TO 55Y	:	59-83	;	59-83
56Y TO 150Y	:	49-87	;	49-87

3318 % CD19 (B CELLS)

UNITS: %

NO SEX

NO AGE	:		;	#N3318
1D TO 2M	:	6-32	;	6-32
3M TO 5M	:	11-41	;	11-41
6M TO 11M	:	14-37	;	14-37
12M TO 23M	:	16-35	;	16-35
24M TO 5Y	:	14-33	;	14-33
6Y TO 11Y	:	13-27	;	13-27
12Y TO 17Y	:	6-23	;	6-23
18Y TO 55Y	:	6-22	;	6-22
56Y TO 150Y	:	3-20	;	3-20

MALE

NO AGE	:		;	#N3318
1D TO 2M	:	6-32	;	6-32
3M TO 5M	:	11-41	;	11-41
6M TO 11M	:	14-37	;	14-37
12M TO 23M	:	16-35	;	16-35
24M TO 5Y	:	14-33	;	14-33
6Y TO 11Y	:	13-27	;	13-27

12Y TO 17Y : 6-23 ; 6-23
18Y TO 55Y : 6-22 ; 6-22
56Y TO 150Y : 3-20 ; 3-20

FEMALE

NO AGE : ; #N3318
1D TO 2M : 6-32 ; 6-32
3M TO 5M : 11-41 ; 11-41
6M TO 11M : 14-37 ; 14-37
12M TO 23M : 16-35 ; 16-35
24M TO 5Y : 14-33 ; 14-33
6Y TO 11Y : 13-27 ; 13-27
12Y TO 17Y : 6-23 ; 6-23
18Y TO 55Y : 6-22 ; 6-22
56Y TO 150Y : 3-20 ; 3-20

4054 % CD16+CD56 (NK CELLS)

UNITS: %

NO SEX

NO AGE : ; #N4054
1D TO 2M : 4-18 ; 4-18
3M TO 5M : 3-14 ; 3-14
6M TO 23M : 3-15 ; 3-15
24M TO 11Y : 4-17 ; 4-17
12Y TO 17Y : 3-22 ; 3-22
18Y TO 55Y : 6-27 ; 6-27
56Y TO 150Y : 6-35 ; 6-35

MALE

NO AGE : ; #N4054
1D TO 2M : 4-18 ; 4-18
3M TO 5M : 3-14 ; 3-14
6M TO 23M : 3-15 ; 3-15
24M TO 11Y : 4-17 ; 4-17
12Y TO 17Y : 3-22 ; 3-22
18Y TO 55Y : 6-27 ; 6-27
56Y TO 150Y : 6-35 ; 6-35

FEMALE

NO AGE : ; #N4054
1D TO 2M : 4-18 ; 4-18
3M TO 5M : 3-14 ; 3-14
6M TO 23M : 3-15 ; 3-15
24M TO 11Y : 4-17 ; 4-17
12Y TO 17Y : 3-22 ; 3-22
18Y TO 55Y : 6-27 ; 6-27
56Y TO 150Y : 6-35 ; 6-35

3319 % CD4 (HELPER CELLS)

UNITS: %

NO SEX

NO AGE : ; #N3319
1D TO 2M : 35-64 ; 35-64

3M TO 5M	:	35-56	;	35-56
6M TO 11M	:	31-56	;	31-56
12M TO 23M	:	32-51	;	32-51
24M TO 5Y	:	28-47	;	28-47
6Y TO 11Y	:	31-47	;	31-47
12Y TO 17Y	:	31-52	;	31-52
18Y TO 55Y	:	31-59	;	31-59
56Y TO 150Y	:	32-67	;	32-67

MALE

NO AGE	:		;	#N3319
1D TO 2M	:	35-64	;	35-64
3M TO 5M	:	35-56	;	35-56
6M TO 11M	:	31-56	;	31-56
12M TO 23M	:	32-51	;	32-51
24M TO 5Y	:	28-47	;	28-47
6Y TO 11Y	:	31-47	;	31-47
12Y TO 17Y	:	31-52	;	31-52
18Y TO 55Y	:	31-59	;	31-59
56Y TO 150Y	:	32-67	;	32-67

FEMALE

NO AGE	:		;	#N3319
1D TO 2M	:	35-64	;	35-64
3M TO 5M	:	35-56	;	35-56
6M TO 11M	:	31-56	;	31-56
12M TO 23M	:	32-51	;	32-51
24M TO 5Y	:	28-47	;	28-47
6Y TO 11Y	:	31-47	;	31-47
12Y TO 17Y	:	31-52	;	31-52
18Y TO 55Y	:	31-59	;	31-59
56Y TO 150Y	:	32-67	;	32-67

3320 % CD8 (SUPP'R CELLS)

UNITS: %

NO SEX

NO AGE	:		;	#N3320
1D TO 2M	:	12-28	;	12-28
3M TO 5M	:	12-23	;	12-23
6M TO 11M	:	12-24	;	12-24
12M TO 23M	:	14-30	;	14-30
24M TO 5Y	:	16-30	;	16-30
6Y TO 17Y	:	18-35	;	18-35
18Y TO 55Y	:	12-38	;	12-38
56Y TO 150Y	:	8-40	;	8-40

MALE

NO AGE	:		;	#N3320
1D TO 2M	:	12-28	;	12-28
3M TO 5M	:	12-23	;	12-23
6M TO 11M	:	12-24	;	12-24
12M TO 23M	:	14-30	;	14-30
24M TO 5Y	:	16-30	;	16-30

6Y TO 17Y : 18-35 ; 18-35
18Y TO 55Y : 12-38 ; 12-38
56Y TO 150Y : 8-40 ; 8-40

FEMALE

No AGE : ; #N3320
1D TO 2M : 12-28 ; 12-28
3M TO 5M : 12-23 ; 12-23
6M TO 11M : 12-24 ; 12-24
12M TO 23M : 14-30 ; 14-30
24M TO 5Y : 16-30 ; 16-30
6Y TO 17Y : 18-35 ; 18-35
18Y TO 55Y : 12-38 ; 12-38
56Y TO 150Y : 8-40 ; 8-40

3322

CD3 (T CELLS)

UNITS: CELLS/uL

NO SEX

No AGE : ; #N3322
1D TO 2M : 2500-5500 ; 2500-5500
3M TO 5M : 2500-5600 ; 2500-5600
6M TO 11M : 1900-5900 ; 1900-5900
12M TO 23M : 2100-6200 ; 2100-6200
24M TO 5Y : 1400-3700 ; 1400-3700
6Y TO 11Y : 1200-2600 ; 1200-2600
12Y TO 17Y : 1000-2200 ; 1000-2200
18Y TO 55Y : 677-2383 ; 677-2383
56Y TO 150Y : 617-2254 ; 617-2254

MALE

No AGE : ; #N3322
1D TO 2M : 2500-5500 ; 2500-5500
3M TO 5M : 2500-5600 ; 2500-5600
6M TO 11M : 1900-5900 ; 1900-5900
12M TO 23M : 2100-6200 ; 2100-6200
24M TO 5Y : 1400-3700 ; 1400-3700
6Y TO 11Y : 1200-2600 ; 1200-2600
12Y TO 17Y : 1000-2200 ; 1000-2200
18Y TO 55Y : 677-2383 ; 677-2383
56Y TO 150Y : 617-2254 ; 617-2254

FEMALE

No AGE : ; #N3322
1D TO 2M : 2500-5500 ; 2500-5500
3M TO 5M : 2500-5600 ; 2500-5600
6M TO 11M : 1900-5900 ; 1900-5900
12M TO 23M : 2100-6200 ; 2100-6200

24M TO 5Y : 1400-3700 ; 1400-3700
6Y TO 11Y : 1200-2600 ; 1200-2600
12Y TO 17Y : 1000-2200 ; 1000-2200
18Y TO 55Y : 677-2383 ; 677-2383
56Y TO 150Y : 617-2254 ; 617-2254

3324

CD19 (B CELLS)

UNITS: CELLS/UL

NO SEX

No AGE	:		; #N3324
1D TO 2M	:	300-2000	; 300-2000
3M TO 5M	:	430-3000	; 430-3000
6M TO 11M	:	610-2600	; 610-2600
12M TO 23M	:	720-2600	; 720-2600
24M TO 5Y	:	390-1400	; 390-1400
6Y TO 11Y	:	270-860	; 270-860
12Y TO 17Y	:	110-570	; 110-570
18Y TO 55Y	:	99-527	; 99-527
56Y TO 150Y	:	31-409	; 31-409

MALE

No AGE	:		; #N3324
1D TO 2M	:	300-2000	; 300-2000
3M TO 5M	:	430-3000	; 430-3000
6M TO 11M	:	610-2600	; 610-2600
12M TO 23M	:	720-2600	; 720-2600
24M TO 5Y	:	390-1400	; 390-1400
6Y TO 11Y	:	270-860	; 270-860
12Y TO 17Y	:	110-570	; 110-570
18Y TO 55Y	:	99-527	; 99-527
56Y TO 150Y	:	31-409	; 31-409

FEMALE

No AGE	:		; #N3324
1D TO 2M	:	300-2000	; 300-2000
3M TO 5M	:	430-3000	; 430-3000
6M TO 11M	:	610-2600	; 610-2600
12M TO 23M	:	720-2600	; 720-2600
24M TO 5Y	:	390-1400	; 390-1400
6Y TO 11Y	:	270-860	; 270-860
12Y TO 17Y	:	110-570	; 110-570
18Y TO 55Y	:	99-527	; 99-527
56Y TO 150Y	:	31-409	; 31-409

4055

CD16+CD56 (NK CELLS)

UNITS: CELLS/UL

NO SEX

No AGE	:		; #N4055
1D TO 2M	:	170-1100	; 170-1100
3M TO 5M	:	170-830	; 170-830
6M TO 11M	:	160-950	; 160-950
12M TO 23M	:	180-920	; 180-920
24M TO 5Y	:	130-720	; 130-720
6Y TO 11Y	:	100-480	; 100-480
12Y TO 17Y	:	70-480	; 70-480
18Y TO 55Y	:	101-678	; 101-678
56Y TO 150Y	:	110-657	; 110-657

MALE

No AGE	:		; #N4055
1D TO 2M	:	170-1100	; 170-1100
3M TO 5M	:	170-830	; 170-830
6M TO 11M	:	160-950	; 160-950
12M TO 23M	:	180-920	; 180-920
24M TO 5Y	:	130-720	; 130-720
6Y TO 11Y	:	100-480	; 100-480
12Y TO 17Y	:	70-480	; 70-480
18Y TO 55Y	:	101-678	; 101-678
56Y TO 150Y	:	110-657	; 110-657

FEMALE

No AGE	:		; #N4055
1D TO 2M	:	170-1100	; 170-1100
3M TO 5M	:	170-830	; 170-830
6M TO 11M	:	160-950	; 160-950
12M TO 23M	:	180-920	; 180-920
24M TO 5Y	:	130-720	; 130-720
6Y TO 11Y	:	100-480	; 100-480
12Y TO 17Y	:	70-480	; 70-480
18Y TO 55Y	:	101-678	; 101-678
56Y TO 150Y	:	110-657	; 110-657

3325

CD4 (HELPER CELLS)

UNITS: CELLS/UL

NO SEX

No AGE	:		; #N3325
1D TO 2M	:	1600-4000	; 1600-4000
3M TO 5M	:	1800-4000	; 1800-4000
6M TO 11M	:	1400-4300	; 1400-4300
12M TO 23M	:	1300-3400	; 1300-3400
24M TO 5Y	:	700-2200	; 700-2200
6Y TO 11Y	:	650-1500	; 650-1500
12Y TO 17Y	:	530-1300	; 530-1300
18Y TO 55Y	:	424-1509	; 424-1509
56Y TO 150Y	:	430-1513	; 430-1513

MALE

No AGE	:		; #N3325
1D TO 2M	:	1600-4000	; 1600-4000
3M TO 5M	:	1800-4000	; 1800-4000
6M TO 11M	:	1400-4300	; 1400-4300
12M TO 23M	:	1300-3400	; 1300-3400
24M TO 5Y	:	700-2200	; 700-2200

6Y TO 11Y	:	650-1500	; 650-1500
12Y TO 17Y	:	530-1300	; 530-1300
18Y TO 55Y	:	424-1509	; 424-1509
56Y TO 150Y	:	430-1513	; 430-1513

FEMALE

No AGE	:		; #N3325
1D TO 2M	:	1600-4000	; 1600-4000
3M TO 5M	:	1800-4000	; 1800-4000

6M TO 11M	: 1400-4300	; 1400-4300
12M TO 23M	: 1300-3400	; 1300-3400
24M TO 5Y	: 700-2200	; 700-2200
6Y TO 11Y	: 650-1500	; 650-1500
12Y TO 17Y	: 530-1300	; 530-1300
18Y TO 55Y	: 424-1509	; 424-1509
56Y TO 150Y	: 430-1513	; 430-1513

3326 CD8 (SUPP'R CELLS)

UNITS: CELLS/UL

NO SEX

No AGE	:	; #N3326
1D TO 2M	: 560-1700	; 560-1700
3M TO 5M	: 590-1600	; 590-1600
6M TO 11M	: 500-1700	; 500-1700
12M TO 23M	: 620-2000	; 620-2000
24M TO 5Y	: 490-1300	; 490-1300
6Y TO 11Y	: 370-1100	; 370-1100
12Y TO 17Y	: 330-920	; 330-920
18Y TO 55Y	: 169-955	; 169-955
56Y TO 150Y	: 101-839	; 101-839

MALE

No AGE	:	; #N3326
1D TO 2M	: 560-1700	; 560-1700
3M TO 5M	: 590-1600	; 590-1600
6M TO 11M	: 500-1700	; 500-1700
12M TO 23M	: 620-2000	; 620-2000
24M TO 5Y	: 490-1300	; 490-1300
6Y TO 11Y	: 370-1100	; 370-1100
12Y TO 17Y	: 330-920	; 330-920
18Y TO 55Y	: 169-955	; 169-955
56Y TO 150Y	: 101-839	; 101-839

FEMALE

No AGE	:	; #N3326
1D TO 2M	: 560-1700	; 560-1700
3M TO 5M	: 590-1600	; 590-1600
6M TO 11M	: 500-1700	; 500-1700
12M TO 23M	: 620-2000	; 620-2000
24M TO 5Y	: 490-1300	; 490-1300
6Y TO 11Y	: 370-1100	; 370-1100
12Y TO 17Y	: 330-920	; 330-920
18Y TO 55Y	: 169-955	; 169-955
56Y TO 150Y	: 101-839	; 101-839

3327 H/S RATIO

NO SEX

ALL AGES	: 1.0-	; >=1.0
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MALE

ALL AGES	: 1.0-	; >=1.0
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FEMALE

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      ALL AGES : 1.0-                ; >=1.0
- - - - -
6657  COMMENT
- - - - -
8884  12/5/2008  LYMPHOCYTE PROLIFERATION, MITOGENS                MCR
      TRANSPORT TEMP : AMBIENT <48 HOURS\REFRIG NO\FROZEN NO

8884  LYMPHOCYTE PROLIFERATION, MITOGENS
      NO SEX
      ALL AGES :                ; NARRATIVE REPORT
      MALE
      ALL AGES :                ; NARRATIVE REPORT
      FEMALE
      ALL AGES :                ; NARRATIVE REPORT
- - - - -
26504 PHYTOHEMAGGLUTININ, 0.5 MCG/ML
      UNITS: %NC
- - - - -
26505 PHYTOHEMAGGLUTININ, 1.0 MCG/ML
      UNITS: %NC
- - - - -
26506 PHYTOHEMAGGLUTININ, 2.5 MCG/ML
      UNITS: %NC
- - - - -
26507 PHYTOHEMAGGLUTININ, 5.0 MCG/ML
      UNITS: %NC
- - - - -
26508 INTERPRETATION, PHA
      NO SEX
      ALL AGES :                ; #N8884A
      MALE
      ALL AGES :                ; #N8884A
      FEMALE
      ALL AGES :                ; #N8884A
- - - - -
26509 POKEWEEED, 0.5 MCG/ML
      UNITS: %NC
- - - - -
26510 POKEWEEED, 1.0 MCG/ML
      UNITS: %NC
- - - - -
26511 POKEWEEED, 5.0 MCG/ML
      UNITS: %NC
- - - - -
26512 POKEWEEED 10.0 MCG/ML
      UNITS: %NC
- - - - -
26513 INTERPRETATION, PWM
      NO SEX
      ALL AGES :                ; #N8884A

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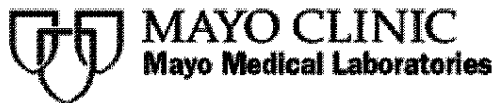
	MALE	
	ALL AGES :	; #N8884A
	FEMALE	
	ALL AGES :	; #N8884A
- - - - -		
26514	CONCONAVALIN A, 0.5 MCG/ML	
	UNITS: %NC	
- - - - -		
26515	CONCONAVALIN A, 2.0 MCG/ML	
	UNITS: %NC	
- - - - -		
26516	CONCONAVALIN A, 5.0 MCG/ML	
	UNITS: %NC	
- - - - -		
26517	CONCONAVALIN A, 10.0 MCG/ML	
	UNITS: %NC	
- - - - -		
26518	INTERPRETATION CONA	
	NO SEX	
	ALL AGES :	; #N8884A
	MALE	
	ALL AGES :	; #N8884A
	FEMALE	
	ALL AGES :	; #N8884A
- - - - -		

*PERFORMING SITE LEGEND

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MCR      MAYO CLINIC DPT OF LAB MED & PATHOLOGY      LAB DIRECTOR:  FRANKLIN R. COCKERILL, III, M.D.
          200 FIRST STREET SW
          ROCHESTER, MN 55905
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LABORATORY SERVICE REPORT

1-800-533-1710

PATIENT NAME TESTING, SHANNON		PATIENT NUMBER		AGE 32	SEX M	ACCESSION # G9132307
ORDERING PHYSICIAN		CLIENT ORDER #				ACCOUNT # LIAISONS
COLLECTION 07/21/09 10:34 A	RECEIVED	REPORT PRINTED 08/03/09 09:55 A		SPECIMEN INFORMATION DATE OF BIRTH: 10/15/1976		
DATE	TIME	DATE	TIME	DATE	TIME	
Test Client Attn: Mayo Liaisons 200 First Street SW Rochester, MN 55905 507-284-8202						

TEST REQUESTED	HI	LO	REF RANGE	PERFORM SITE *
Lymphocyte Proliferation, Mitogens				
Phytohemagglutinin, 0.5 mcg/mL	59		%NC	MCR
Phytohemagglutinin, 1.0 mcg/mL	75		%NC	MCR
Phytohemagglutinin, 2.5 mcg/mL	84		%NC	MCR
Phytohemagglutinin, 5.0 mcg/mL	90		%NC	MCR
Interpretation, PHA				
Normal Control cells are tested simultaneously.				
Maximum %NC of normal control proliferation is 90.				
-- EXPECTED VALUES --				
>70 (Normal)				
51-70 (Slightly Diminished)				
30-50 (Diminished)				
<30 (Markedly Diminished)				
All Lymphocyte Proliferation, Mitogens assays reported have a cell viability of >85%.				
Pokeweed, 0.5 mcg/mL	72		%NC	MCR
Pokeweed, 1.0 mcg/mL	66		%NC	MCR
Pokeweed, 5.0 mcg/mL	55		%NC	MCR
Pokeweed 10.0 mcg/mL	53		%NC	MCR
Interpretation, PWM				
Normal Control cells are tested simultaneously.				
Maximum %NC of normal control proliferation is 72.				
-- EXPECTED VALUES --				
>70 (Normal)				
51-70 (Slightly Diminished)				
30-50 (Diminished)				

* Perform Site Legend on last page of report

PATIENT NAME TESTING, SHANNON	ORDER STATUS Final	COLLECTION DATE AND TIME 07/21/09 10:34 A
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Specimen receipt and report times are in CST/CDT

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08/03/2009 9:57AM



LABORATORY SERVICE REPORT

1-800-533-1710

PATIENT NAME TESTING, SHANNON		PATIENT NUMBER		AGE 32	SEX M	ACCESSION # G9132307
ORDERING PHYSICIAN		CLIENT ORDER #				ACCOUNT # LIAISONS
COLLECTION 07/21/09 10:34 A	RECEIVED	REPORT PRINTED 08/03/09 09:55 A		SPECIMEN INFORMATION DATE OF BIRTH: 10/15/1976		
DATE	TIME	DATE	TIME	DATE	TIME	
Test Client Attn: Mayo Liaisons 200 First Street SW Rochester, MN 55905 507-284-8202						

TEST REQUESTED	HI LO	REF RANGE	PERFORM SITE *
<30 (Markedly Diminished) All Lymphocyte Proliferation, Mitogens assays reported have a cell viability of >85%.			
Concanavalin A, 0.5 mcg/mL	11	%NC	MCR
Concanavalin A, 2.0 mcg/mL	37	%NC	MCR
Concanavalin A, 5.0 mcg/mL	61	%NC	MCR
Concanavalin A, 10.0 mcg/mL	57	%NC	MCR
Interpretation ConA			MCR
Normal Control cells are tested simultaneously. Maximum %NC of normal control proliferation is 61. -- EXPECTED VALUES -- >70 (Normal) 51-70 (Slightly Diminished) 30-50 (Diminished) <30 (Markedly Diminished) All Lymphocyte Proliferation, Mitogens assays reported have a cell viability of >85%.			
T- & B-Cell QN by Flow Cytometry			
CD45 Lymph Count, Flow	2.62	thou/uL	0.99-3.15 MCR
% CD3 (T Cells)	82	%	59-83 MCR
% CD19 (B Cells) H	27	%	6-22 MCR
% CD16+CD56 (NK cells) H	56	%	6-27 MCR
% CD4 (Helper Cells) L	6	%	31-59 MCR
% CD8 (Supp'r Cells) L	11	%	12-38 MCR

* Perform Site Legend on last page of report

PATIENT NAME TESTING, SHANNON	ORDER STATUS Final	COLLECTION DATE AND TIME 07/21/09 10:34 A
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LABORATORY SERVICE REPORT

1-800-533-1710

PATIENT NAME TESTING, SHANNON		PATIENT NUMBER		AGE 32	SEX M	ACCESSION # G9132307
ORDERING PHYSICIAN		CLIENT ORDER #				ACCOUNT # LIAISONS
COLLECTION 07/21/09 10:34 A	RECEIVED	REPORT PRINTED 08/03/09 09:55 A		SPECIMEN INFORMATION DATE OF BIRTH: 10/15/1976		
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Test Client Attn: Mayo Liaisons 200 First Street SW Rochester, MN 55905 507-284-8202						

TEST REQUESTED	HI LO			REF RANGE	PERFORM SITE *
CD3 (T Cells)		2148	cells/uL	677-2383	MCR
CD19 (B Cells)		168	cells/uL	99-527	MCR
CD16+CD56 (NK cells)		281	cells/uL	101-678	MCR
CD4 (Helper Cells)		713	cells/uL	424-1509	MCR
CD8 (Supp'r Cells)	H	1466	cells/uL	169-955	MCR
H/S Ratio	L	0.49		>=1.0	MCR

* PERFORMING SITE

MCR Mayo Clinic Dpt of Lab Med & Pathology 200 First Street SW Rochester, MN 55905	Lab Director: Franklin R. Cockerill, III, M.D.
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PATIENT NAME TESTING, SHANNON	ORDER STATUS Final	COLLECTION DATE AND TIME 07/21/09 10:34 A
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