

Lymphocyte Proliferation to  
Anti-CD3/Anti-CD28 and  
Anti-CD3/Interleukin-2 (IL-2) by Flow  
Cytometry, Blood

**Reporting Title:** Lymphocyte Proliferation, aCD3  
**Performing Location:** Rochester

**Shipping Instructions:**  
**Specimens must be received in the laboratory weekdays and by 4 p.m. on Friday.** Collect and package specimen as close to shipping time as possible. Ship specimen overnight in an Ambient Shipping Box-Critical Specimens Only (T668) following the instructions in the box.

It is recommended that specimens arrive within 24 hours of collection.

Samples arriving on the weekend and observed holidays may be canceled.

- Necessary Information:**
- 1. Date and time of collection are required.
  - 2. Ordering physician's name and phone number are required.

**Specimen Requirements:**  
**Supplies:** Ambient Shipping Box-Critical Specimens Only (T668)  
**Container/Tube:** Green top (sodium heparin)  
**Specimen Volume:** 20 mL  
See tables for information on recommended volume based on absolute lymphocyte count  
**Pediatric Volume:**  
<3 months: 1 mL  
3-24 months: 3 mL  
25 months-18 years: 5 mL  
**Collection Instructions:** Send whole blood specimen in original tube. **Do not aliquot.**  
**Additional Information:** For serial monitoring, it is recommended that specimen collection be performed at the same time of day.

Table. Blood Volume Recommendations Based on Absolute Lymphocyte Count (ALC)

ALC	Blood volume for minimum aCD28 only	Blood volume for minimum of aCD3, aCD28, and IL-2	Blood volume for full assay
<0.5	>15 mL	>28 mL	>50 mL
0.5-1.0	15 mL	28 mL	50 mL
1.1-1.5	6.5 mL	12 mL	24 mL
1.6-2.0	4.5 mL	8.5 mL	16 mL
2.1-3.0	3.5 mL	6.5 mL	12 mL
3.1-4.0	2.5 mL	4.5 mL	8 mL
4.1-5.0	1.8 mL	3.5 mL	6 mL
>5.0	1.5 mL	2.5 mL	5 mL

Test Definition: LPA3P

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Specimen Type	Temperature	Time	Special Container
WB Sodium Heparin	Ambient	48 hours	GREEN TOP/HEP

Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
35203	Viab of Lymphs at Day 0	Unknown	%	33193-4
35171	Max Prolif, soluble aCD3 as % CD45	Alphanumeric	%	81760-1
35172	Max Prolif, soluble aCD3 as % CD3	Alphanumeric	%	81756-9
35173	Max Prolif, soluble aCD28 as % CD45	Alphanumeric	%	81759-3
35174	Max Prolif, soluble aCD28 as % CD3	Alphanumeric	%	81758-5
35176	Max Prolif, soluble IL2 as % CD45	Alphanumeric	%	81755-1
35177	Max Prolif, soluble IL2 as % CD3	Alphanumeric	%	81757-7
35204	aCD3 Comment	Alphanumeric		48767-8
35205	Interpretation	Alphanumeric		69965-2

LOINC® and CPT codes are provided by the performing laboratory.

Supplemental Report:

No

CPT Code Information:

86353 x 2

86353 (as appropriate)

Reflex Tests:

Test Id	Reporting Name	CPT Units	CPT Code	Always Performed	Available Separately
ADSTM	Additional Flow Stimulant	1	86353	No	No, (Bill Only)

Reference Values:

- Viability of lymphocytes at day 0: > or =75.0%
- Maximum proliferation of anti-CD3 as % CD45: > or =19.4%
- Maximum proliferation of anti-CD3 as % CD3: > or =20.3%
- Maximum proliferation of anti-CD3 + anti-CD28 as % CD45: > or =37.5%
- Maximum proliferation of anti-CD3 + anti-CD28 as % CD3: > or =44.6%
- Maximum proliferation of anti-CD3 + IL-2 as % CD45: > or =41.7%
- Maximum proliferation of anti-CD3 + IL-2 as % CD3: > or =46.2%

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