MAYO CLINIC
Mayo Medical Laboratories

1-800-533-1710

TREGS

T-Cell Subsets, Regulatory (Tregs)

Patient ID	Patient Name		Birth Date	Gender	Age
SA00057312	SAMPLEREPORT, TREGS		1966-06-10	F	46
Order Number	**Client Order Number**	**Ordering Physician**	**Report Notes**		
SA00057312	SA00057312	Client, Client			
Account Information		**Collected**			
C7028846 DLMP Rochester		08 May 2013 00:00			

T Cell Subsets, Regulatory (Tregs)

% Activated CD4+ T cells (4+CD25+) MCR

24.4 % CD4 T cells

Reference Value 2.4–35.0

% Natural Tregs MCR

⚠ 7.3 % CD4 T-cells High

Reference Value 0.6–4.3

% N. Naive Tregs MCR

⚠ 0.0 % CD4 T-cells Low

Reference Value 0.1–2.3

% CD4+CD25-CD127+ (Tr1/Th3) MCR

⚠ 20 % CD4 T-cells Low

Reference Value 24–88

Activated CD4+ T cells (4+CD25+) MCR

174 cells/mcL

Reference Value 16–323

CD4+CD25+CD127loCD45RO+ (Nat Tregs) MCR

⚠ 52 cells/mcL High

Reference Value 5–43

CD4+CD25+CD127loCD45RA+ Naive Tregs MCR

⚠ 0.2 cells/mcL Low

Reference Value 0.4–22.0

CD4+CD25-CD127+ (Tr1/Th3) MCR

272 cells/mcL

Reference Value 133–1304

Interpretation [1] MCR

Normal total CD4 T cell count in blood. There are relatively very few CD4+45RA+ T cells compared to CD4+45RO+ T cells, as a result quantitative Treg subset analysis reveals reduction in both % and absolute count of natural naive (Nn) Tregs. For the same reason, there is a proportionate increase in the % and absolute count of natural Tregs, derived from the CD4+45RO+ population. Additionally, there is a decrease in only the relative frequency (%) of induced Treg precursors (Tr1/Th3). This result suggests that there is an impairment in thymic function and the normal total CD4 T cells is likely related to homeostatic expansion of pre-existing T cells.

ADDITIONAL INFORMATION

CD4+CD25+CD127- T-cells are FOXP3-expressing regulatory T-cells. Seddiki N et al, J. Exp Med. 2006, 203(7):1693–1700 and Liu W et al, J Exp Med, 2006, 203(7):1701–1711.

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Laboratory Notes

[1] Analyte Specific Reagent: This test was developed and its performance characteristics determined by Mayo Clinic. It has not been cleared or approved by the U.S. Food and Drug Administration.

Performing Site Legend

Code	Laboratory	Address
MCR	Mayo Clinic Dept. of Lab Med and Pathology	200 First Street SW, Rochester, MN 55905