MAYO CLINIC
Mayo Medical Laboratories

Laboratory Service Report 1-800-533-1710

Patient Name	Patient ID	Age	Gender	Order #
SAMPLEREPORT,HMDP	SA00056603	46	F	SA00056603
Ordering Phys CLIENT,CLIENT				**DOB** 06/10/1966
Client Order # SA00056603	**Account Information**			**Report Notes**
Collected 04/15/2013 13:00	C7028846-DLMP Rochester 3050 Superior Drive Rochester, MN 55901			
Printed 04/22/2013 15:46				

Test	Flag	Results	Unit	Reference Value	Perform Site*
Hyper IgM Panel, B			REPORTED 04/16/2013 11:25		
T- and B-Cell QN by Flow Cytometry					
CD45 Lymph Count, Flow		1.18	thou/mcL	0.82-2.84	MCR
% CD3 (T Cells)		80	%	58-86	MCR
% CD19 (B Cells)		15	%	6-24	MCR
% CD16+CD56 (NK cells)		5	%	4-28	MCR
% CD4 (Helper Cells)		43	%	32-64	MCR
% CD8 (Supp'r Cells)		36	%	13-40	MCR
CD3 (T Cells)		938	cells/mcL	550-2202	MCR
CD19 (B Cells)		172	cells/mcL	70-409	MCR
CD16+CD56 (NK cells)		60	cells/mcL	59-513	MCR
CD4 (Helper Cells)		505	cells/mcL	365-1437	MCR
CD8 (Supp'r Cells)		426	cells/mcL	145-846	MCR
H/S Ratio		1.2		>=0.9	MCR
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.					
Immune Assessment B Cell Subsets, B					
CD19+ % of total Lymphocytes		12.5	%	2.8-17.4	MCR
CD20+ % of total Lymphocytes		12.7	%	3.2-16.8	MCR
CD27+ % of CD19+ B cells		32.5	%	6.3-52.8	MCR
CD27+ IgM+ IgD+ % of CD19+ B cells		20.1	%	1.7-29.3	MCR
CD27+ IgM- IgD- % of CD19+ B cells		6.3	%	2.3-26.5	MCR
CD27+ IgM+ IgD- % of CD19+ B cells		4.2	%	0.0-5.3	MCR
IgM+ % of CD19+ B cells		62.1	%	26.0-78.0	MCR
CD38+ IgM- % of CD19+ B cells		25.7	%	4.1-42.2	MCR
CD38+ IgM+ % of CD19+ B cells		5.3	%	1.2-50.7	MCR
CD21+ % of CD19+ B cells		97.6	%	92.1-99.6	MCR
CD21- % of CD19+ B cells		4.6	%	0.2-8.6	MCR
CD19+		147.5	cells/mcL	90.0-539.0	MCR
CD20+		149.9	cells/mcL	95.0-580.8	MCR
CD27+		47.9	cells/mcL	18.0-145.0	MCR
CD27+ IgM+ IgD+		29.6	cells/mcL	4.0-85.0	MCR
CD27+ IgM- IgD-		9.3	cells/mcL	7.0-61.0	MCR
CD27+ IgM+ IgD-		6.2	cells/mcL	0.0-12.0	MCR
IgM+		91.6	cells/mcL	37.0-327.0	MCR
CD38+ IgM-		37.9	cells/mcL	7.0-153.0	MCR
CD38+ IgM+		7.8	cells/mcL	2.0-139.4	MCR
CD21+		144.0	cells/mcL	85.0-533.0	MCR
CD21-		6.8	cells/mcL	0.3-22.0	MCR
Interpretation					MCR
Normal T, B, and NK cell subsets in whole blood. Quantitative B cell subset immunophenotyping is normal.					

Performing Site Legend on Last Page of Report

* Report times for Mayo performed tests are CST/CDT

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Unable to provide further interpretation without clinical information. Clinical correlation recommended. This assay is performed using peripheral blood mononuclear cells (PBMC) isolated from whole blood. CD19 percentage and absolute results should not be directly compared to the CD19 results from the T and B cell Surface Markers AG assay using whole blood, because cells are lost during the PBMC isolation process. 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.					
CD40 by Flow, QL, B					MCR
CD40 is expressed on 92% of CD19+ B cells (normal) and the intensity of expression is also normal. Unable to provide further interpretation without clinical information. Clinical correlation recommended. 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.					
X-Linked Hyper IgM Syndrome, B					
Hyper IgM Functional		Present		Present	MCR
CD40muIg (Function)		Present		Present	MCR
Interpretation					MCR
There is normal activation of CD4 T cells with CD69 expression. CD40L (CD154) expression on activated CD4 T cells is normal and binding of the CD40 ligand to soluble receptor- CD40uIg is also normal. Therefore, this result does not appear to be consistent with carrier status for X-linked Hyper IgM syndrome for this female patient. Unable to provide further interpretation without clinical information. Clinical correlation recommended. 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:

MCR	Mayo Clinic Laboratories - Rochester Main Campus 200 First St SW Rochester, MN 55905	Lab Director: Franklin R. Cockerill, III, M.D.