

Hyperimmunoglobulin M (Hyper-IgM) Defects
 Panel

Patient ID SA00056603	Patient Name SAMPLEREPOR, HMDP	Birth Date 1966-06-10	Gender F	Age 46
Order Number SA00056603	Client Order Number SA00056603	Ordering Physician Client, Client	Report Notes	
Account Information C7028846 DLMP Rochester		Collected 15 Apr 2013 13:00		

Hyper IgM Panel, B

T- and B-Cell QN by Flow Cytometry

CD45 Lymph Count, Flow

1.18 thou/mcL

 MCR
 Reference Value
 0.82–2.84

CD3 (T Cells)

938 cells/mcL

 MCR
 Reference Value
 550–2202

% CD3 (T Cells)

80 %

 MCR
 Reference Value
 58–86

CD19 (B Cells)

172 cells/mcL

 MCR
 Reference Value
 70–409

% CD19 (B Cells)

15 %

 MCR
 Reference Value
 6–24

CD16+CD56 (NK cells)

60 cells/mcL

 MCR
 Reference Value
 59–513

% CD16+CD56 (NK cells)

5 %

 MCR
 Reference Value
 4–28

CD4 (Helper Cells)

505 cells/mcL

 MCR
 Reference Value
 365–1437

% CD4 (Helper Cells)

43 %

 MCR
 Reference Value
 32–64

CD8 (Supp'r Cells)

426 cells/mcL

 MCR
 Reference Value
 145–846

% CD8 (Supp'r Cells)

36 %

 MCR
 Reference Value
 13–40

H/S Ratio

1.2

 MCR
 Reference Value
 ≥0.9

Immune Assessment B Cell Subsets, B

CD19+ % of total Lymphocytes

12.5 %

 MCR
 Reference Value
 2.8–17.4

CD27+ IgM+ IgD+ % of CD19+ B cells

20.1 %

 MCR
 Reference Value
 1.7–29.3

CD20+ % of total Lymphocytes

12.7 %

 MCR
 Reference Value
 3.2–16.8

CD27+ IgM- IgD- % of CD19+ B cells

6.3 %

 MCR
 Reference Value
 2.3–26.5

CD27+ % of CD19+ B cells

32.5 %

 MCR
 Reference Value
 6.3–52.8

CD27+ IgM+ IgD- % of CD19+ B cells

4.2 %

 MCR
 Reference Value
 0.0–5.3

Performing Site Legend

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

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IgM+ % of CD19+ B cells MCR
 62.1 % Reference Value
26.0–78.0

CD38+ IgM- % of CD19+ B cells MCR
 25.7 % Reference Value
4.1–42.2

CD38+ IgM+ % of CD19+ B cells MCR
 5.3 % Reference Value
1.2–50.7

CD21+ % of CD19+ B cells MCR
 97.6 % Reference Value
92.1–99.6

CD21- % of CD19+ B cells MCR
 4.6 % Reference Value
0.2–8.6

CD19+ MCR
 147.5 cells/mcL Reference Value
90.0–539.0

CD20+ MCR
 149.9 cells/mcL Reference Value
95.0–580.8

CD27+ MCR
 47.9 cells/mcL Reference Value
18.0–145.0

CD27+ IgM+ IgD+ MCR
 29.6 cells/mcL Reference Value
4.0–85.0

CD27+ IgM- IgD- MCR
 9.3 cells/mcL Reference Value
7.0–61.0

CD27+ IgM+ IgD- MCR
 6.2 cells/mcL Reference Value
0.0–12.0

IgM+ MCR
 91.6 cells/mcL Reference Value
37.0–327.0

CD38+ IgM- MCR
 37.9 cells/mcL Reference Value
7.0–153.0

CD38+ IgM+ MCR
 7.8 cells/mcL Reference Value
2.0–139.4

CD21+ MCR
 144.0 cells/mcL Reference Value
85.0–533.0

CD21- MCR
 6.8 cells/mcL Reference Value
0.3–22.0

Interpretation MCR
 Normal T, B, and NK cell subsets in whole blood. Quantitative B cell subset immunophenotyping is normal. Unable to provide further interpretation without clinical information. Clinical correlation recommended.

ADDITIONAL INFORMATION
 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.

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CD40 by Flow, QL, B

1 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.

X-Linked Hyper IgM Syndrome, B

CD40 Ligand Expression

Present

MCR

Reference Value
Present

CD40mulg (Function)

Present

MCR

Reference Value
Present

Interpretation

1 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- CD40ulg 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.

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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.

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