

Patient ID <b>SA00062921</b>	Patient Name <b>SAMPLEREP, CMVC8</b>	Birth Date <b>1966-06-10</b>	Gender <b>F</b>	Age <b>47</b>
Order Number <b>SA00062921</b>	Client Order Number <b>SA00062921</b>	Ordering Physician <b>Client, Client</b>	Report Notes	
Account Information <b>C7028846 DLMP Rochester</b>		Collected <b>02 Oct 2013 00:00</b>		

**CMV CD8 T-Cell QN by Flow Cytometry**

**Total CD3 T cells**

MCR

925 cells

REFERENCE VALUE

884–5830 x10(3) cells/mL

**Total CD8 T cells**

MCR

327 cells

REFERENCE VALUE

168–1847 x10(3) cells/mL

**CMV CD8 T cells A2**

MCR

0.600 cells

**Total CMV CD8 T cells**

MCR

0 cells

REFERENCE VALUE

0–115 x10(3) cells/mL


**CMV CD8 T cells IFN-g A2**

MCR

0.000 cells

**Total CMV CD8 T cells IFN-g**

MCR

 0.000 cells

Low

REFERENCE VALUE

0.028–52.200 x10(3) cells/mL


**CMV CD8 T cells CD107 A2**

MCR

0.000 cells

**Total CMV CD8 T cells CD107a/b**

MCR

 0.000 cells

Low

REFERENCE VALUE

0.252–50.700 x10(3) cells/mL

**IFN-gamma expression**

MCR

10.5 % CD8 T-Cells

Reference Value  
10.3–56.0

**CD107a/b expression**

MCR

19.7 % CD8 T-Cells

Reference Value  
8.5–49.1

**Interpretation**

1 MCR

Patient cells are positive only for HLA A2, one of the five HLA class I alleles (A1, A2, B7, B8 and B35) tested for CMV-CD8 T cell immunity in this assay. Total CD3 and CD8 T cell counts are within normal limits at the present time. There were fewer than 2 cells/uL for HLA A2-specific CMV peptide (pp65) so functional testing of the allele-specific CMV- CD8 T cells (IFN-gamma and CD107a and b) could not be performed. Thus, the CMV- total CD8 T cell immune competence (TIC) score = 0 for this HLA class I allele-CMV peptide combination. This result would not be consistent with an effective CMV CD8 T cell immune response for this specific MHC class I allele/peptide. This patient is CMV mismatched with evidence of CMV viremia on I.V. valganciclovir, which supports the observed TIC score and lack of an effective CMV-CD8 T cell immune response. However, there is normal global CD8 T cell function, as measured by IFN-gamma production after T cell activation and CD107a/b expression (a surrogate marker of cytotoxic function), though the latter is at the lower limit of normal, suggesting that overall CD8 T cell cytotoxic function may also not be very robust.

Received: 03 Oct 2013 15:31

Reported: 03 Oct 2013 15:43

**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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QA Environment

**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