

Patient Name SAMPLEREP,CMVC8	Patient ID SA00062921	Age 47	Gender F	Order # SA00062921
Ordering Phys CLIENT,CLIENT				DOB 06/10/1966
Client Order # SA00062921	Account Information			Report Notes
Collected 10/02/2013 00:00	C7028846-DLMP Rochester SDSC 2 - Client Support Rochester, MN 55901			
Printed 10/04/2013 13:25				

Test	Flag	Results	Unit	Reference Value	Perform Site*
CMV CD8 T-Cell QN by Flow Cytometry					
RECEIVED: 10/03/2013 15:31 REPORTED: 10/03/2013 15:43					
Total CD3 T cells		925	cells		MCR
-- REFERENCE VALUE -- 884-5830 x10(3) cells/mL					
Total CD8 T cells		327	cells		MCR
-- REFERENCE VALUE -- 168-1847 x10(3) cells/mL					
CMV CD8 T cells A2		0.600	cells		MCR
Total CMV CD8 T cells		0	cells		MCR
-- REFERENCE VALUE -- 0-115 x10(3) cells/mL					
CMV CD8 T cells IFN-g A2		0.000	cells		MCR
Total CMV CD8 T cells IFN-g	L	0.000	cells		MCR
-- REFERENCE VALUE -- 0.028-52.200 x10(3) cells/mL					
CMV CD8 T cells CD107 A2		0.000	cells		MCR
Total CMV CD8 T cells CD107a/b	L	0.000	cells		MCR
-- REFERENCE VALUE -- 0.252-50.700 x10(3) cells/mL					
IFN-gamma expression		10.5	% CD8 T-Cells	10.3-56.0	MCR
CD107a/b expression		19.7	% CD8 T-Cells	8.5-49.1	MCR
Interpretation					

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.

Performing Site Legend on Last Page of Report

Patient Name SAMPLEREP,CMVC8	Collection Date and Time 10/02/2013 00:00	Report Status Final
Page 1 of 2	>> Continued on Next Page >>	

* Report times for Mayo performed tests are CST/CDT

Patient Name SAMPLEREP,CMVC8	Patient ID SA00062921	Age 47	Gender F	Order # SA00062921
Ordering Phys CLIENT,CLIENT				DOB 06/10/1966
Client Order # SA00062921	Account Information			Report Notes
Collected 10/02/2013 00:00	C7028846-DLMP Rochester SDSC 2 - Client Support Rochester, MN 55901			
Printed 10/04/2013 13:25				

Test	Flag	Results	Unit	Reference Value	Perform Site*
------	------	---------	------	-----------------	---------------

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:
-----	---	---------------

Patient Name SAMPLEREP,CMVC8	Collection Date and Time 10/02/2013 00:00	Report Status Final
Page 2 of 2		** End of Report **

* Report times for Mayo performed tests are CST/CDT