

<b>Patient Name</b> TESTINGRNV,REPORTS	<b>Patient ID</b> SA00062306	<b>Age</b> 9D	<b>Gender</b> F	<b>Order #</b> SA00062306
<b>Ordering Phys</b> CLIENT,CLIENT				<b>DOB</b> 09/02/2013
<b>Client Order #</b> SA00062306	<b>Account Information</b>			<b>Report Notes</b>
<b>Collected</b> 09/11/2013 00:00	C7028846-DLMP Rochester SDSC 2 - Client Support			
<b>Printed</b> 10/03/2013 09:11	Rochester, MN 55901			

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

**SUMF1 Gene, Full Gene Analysis**
**RECEIVED:** 09/11/2013 11:59 **REPORTED:** 09/16/2013 10:08

## Reason for Referral

MCR

Possible diagnosis of multiple sulfatase deficiency (MSD).  
 Test for the presence of mutations in the SUMF1 gene.

## Result

MCR

A mutation was NOT detected.

## Interpretation

MCR

This result decreases the likelihood but does not rule out the diagnosis of multiple sulfatase deficiency (MSD). We predict that a small percentage of individuals who have a diagnosis of MSD may have mutations that are not identified by the methods described (e.g., large deletions/duplications, promoter mutations, or deep intronic mutations). This assay does not rule out the presence of disease causing mutations in other genes that are associated with sulfatase deficiencies.

This result should be interpreted in the context of clinical findings, family history, and other laboratory testing (e.g. urine sulfatide analysis, iduronate sulfatase and arylsulfatase A and B enzyme levels).

A genetic consultation may be of benefit.

Unless reported or predicted to cause disease, alterations found deep in the intron or alterations that do not result in an amino acid substitution are not reported. These and common polymorphisms identified for this patient are available upon request.

**CAUTIONS**

Test results should be interpreted in context of clinical findings, family history, and other laboratory data. Misinterpretation of results may occur if the information provided is inaccurate or incomplete.

Rare polymorphisms exist that could lead to false negative or positive results. If results obtained do not match the clinical findings, additional testing should be considered.

Bone marrow transplants from allogenic donors will interfere with testing. Call Mayo Medical Laboratories for instructions for testing patients who have received a bone

\*\*\*Performing Site Legend on Last Page of Report\*\*\*

<b>Patient Name</b> TESTINGRNV,REPORTS	<b>Collection Date and Time</b> 09/11/2013 00:00	<b>Report Status</b> Final
Page 1 of 2	>> Continued on Next Page >>	

\* Report times for Mayo performed tests are CST/CDT

<b>Patient Name</b> TESTINGRNV,REPORTS	<b>Patient ID</b> SA00062306	<b>Age</b> 9D	<b>Gender</b> F	<b>Order #</b> SA00062306
<b>Ordering Phys</b> CLIENT,CLIENT				<b>DOB</b> 09/02/2013
<b>Client Order #</b> SA00062306	<b>Account Information</b>			<b>Report Notes</b>
<b>Collected</b> 09/11/2013 00:00	C7028846-DLMP Rochester SDSC 2 - Client Support			
<b>Printed</b> 10/03/2013 09:11	Rochester, MN 55901			

Test	Flag	Results	Unit	Reference Value	Perform Site*
marrow transplant.					
Laboratory developed test.					
Method					MCR
Bi-directional sequence analysis was performed to test for the presence of mutations in all coding regions and intron/exon boundaries of the SUMF1 gene. Mutation nomenclature is based on GenBank accession number NM_182760.3.					
Specimen		Blood			MCR
Reviewed By		Devin Oglesbee PhD			MCR
Release Date		16 Sep 2013 10:05			MCR

\* Performing Site:

MCR	Mayo Clinic Laboratories - Rochester Main Campus 200 First St SW Rochester, MN 55905	Lab Director:
-----	---	---------------

<b>Patient Name</b> TESTINGRNV,REPORTS	<b>Collection Date and Time</b> 09/11/2013 00:00	<b>Report Status</b> Final
Page 2 of 2		** End of Report **

\* Report times for Mayo performed tests are CST/CDT