MAYO CLINIC
Mayo Medical Laboratories

Laboratory Service Report 1-800-533-1710

Patient Name	Patient ID	Age	Gender	Order #
SAMPLEREPORT,REVP	SA00050382	46	F	SA00050382
Ordering Phys				**DOB** 06/10/1966
Client Order # SA00050382	**Account Information**			**Report Notes**
Collected 11/03/2012 23:00	C7028846-DLMP ROCHESTER 3050 SUPERIOR DRIVE ROCHESTER,MN 55901			
Printed 11/05/2012 14:50				

Test	Flag	Results	Unit	Reference Value	Perform Site*
HGB Electrophoresis, Molecular			REPORTED 11/05/2012 14:18		
Alpha Globin Gene Sequencing					MCR
Alpha Globin Gene Sequencing was cancelled on 11/05/2012 at 14:16; Reflex test not required.					
Laboratory developed test.					
Beta Globin Gene Sequencing		Performed			MCR
Laboratory developed test.					
Alpha Globin Gene Sequence					MCR
Alpha Globin Gene Sequence was cancelled on 11/05/2012 at 14:17; Reflex test not required.					
Beta Globin Gene Sequence		Performed			MCR
Beta Globin Gene Del/Dup					MCR
Beta Globin Gene Del/Dup was cancelled on 11/05/2012 at 14:17; Reflex test not required.					
Laboratory developed test.					
Manual DNA Extraction					MCR
Manual DNA Extraction was cancelled on 11/05/2012 at 14:17; Reflex test not required.					
Alpha Globin Gene Sequencing (AGGS) Beta Globin Gene Sequencing (BGGS) and Beta Globin Gene Del/Dup (BGDD) are laboratory developed tests.					
			REPORTED 11/05/2012 14:16		
Hb Variant by Mass Spec, B		Performed			MCR
Laboratory developed test.					
Erythrocytosis Evaluation			REPORTED 11/05/2012 14:21		
Erythrocytosis Interpretation					MCR

Reviewed by Koren Melcher

MOLECULAR RESULTS:
DNA sequence analysis of the Beta gene identifies Hb Bethesda, a heterozygous substitution at codon 145 of TAT to CAT, or Tyr to His.

INTERPRETATION:
These results confirm Hb Bethesda. This hemoglobin variant is associated with erythrocytosis and increased oxygen affinity.

Beta Gene Sequencing Method:
Genomic DNA was extracted and Sanger sequencing reactions performed using primers which flank the coding and non-coding portions of the beta (HBB) genes. This method

Performing Site Legend on Last Page of Report

* Report times for Mayo performed tests are CST/CDT

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allows for detection of hemoglobinopathies and thalassemias caused by point mutations and small insertions or deletions.					
Hemoglobin A2 and F					
Hemoglobin A2		2.5	%	2.0-3.3	MCR
Hemoglobin F		0.0	%	0.0-0.9	MCR
Hemoglobin Electrophoresis, B					
Hemoglobin A	L	56.0	%	95.8-98.0	MCR
Variant		41.5 = Hb Bethesda	%	No abnormal variants	MCR
Oxygen Dissociation P50					
Oxygen Dissociation P50, RBC	L	17	mm Hg	24-30	MCR
IEF Confirms		Performed			MCR

REPORTED 11/05/2012 14:16

Hemoglobin, Unstable, B		Normal			MCR
-- REFERENCE VALUE -- Expected result is normal					

* Performing Site:

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

Patient Name	Collection Date and Time	Report Status
SAMPLEREPORT,REVP	11/03/2012 23:00	Final
		** End of Report **

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