Patient Name	Patient ID	Age	Gender	Order #
TEST,IMPLEMENTATION TESTING	321	57	F	R1057493
Ordering Phys TESTING				**DOB** 05/23/1956
Client Order # R1057493	**Account Information**			**Report Notes**
Collected 06/06/2013 06:00	C7028846-DLMP Rochester 3050 Superior Drive Rochester, MN 55901			
Printed 07/17/2013 11:30				

Test	Flag	Results	Unit	Reference Value	Perform Site*
AP Special Studies Review					
RECEIVED: 06/06/2013 11:51 **REPORTED:** 06/06/2013 17:08					
Accession Number		HR13-167			MCR
Specimen:					MCR
A:AP Slide Review					
Material:					MCR
1 Block					
SLIDE DISPOSITION:					
Final Diagnosis:					MCR

Molecular Anatomic Pathology Report:
Reason for referral: Brain Tumor
Specimen source: Left frontal lobe
Result:
Positive for IDH1 codon 132 c.395G>A p.Arg132H (R132H) mutation and negative for IDH2 codon 172 mutation by PCR and pyrosequencing. All controls worked appropriately.
Interpretation:
A positive test indicates the presence of an IDH1 or IDH2 mutation and supports a diagnosis of grade II or III astrocytoma, oligodendroglioma, oligoastrocytoma or secondary glioblastoma. It is important to note that IDH1 and IDH2 mutations have been found in a variety of other tumors.
IDH1 codon 132 and IDH2 codon 172 mutations have been identified in more than 70% of brain tumors diagnosed as grade II and III astrocytoma, oligodendroglioma, oligoastrocytoma and secondary glioblastomas. These mutations are rarely found in other brain tumors and non-brain tumors. The ordering physician is responsible for the diagnosis and management of disease and decisions based on the data provided.
False-negative results may occur in specimens when tumor cells comprise <40% of the cell population. Tumor cells are routinely enriched by macrodissection to avoid false-negative results.
Clinical diagnosis and/or therapy should not be based solely on this assay. The results should be considered in conjunction with clinical information, histologic evaluation, and/or additional diagnostic tests.
Method:
Mutation analyses were performed using polymerase chain reaction (PCR) and pyrosequencing for codon 132 of the IDH1 gene and codon 172 of the IDH2 gene on DNA extracted from paraffin-embedded tissue.
Laboratory Developed Test

Signing Pathologist:		See Below			MCR

Result:6/6/2013 17:07 Interpreted by: Pathologist X. Test, M.D.
Report electronically signed by Melissa L. Skjeveland

Performing Site Legend on Last Page of Report

* Report times for Mayo performed tests are CST/CDT

MAYO CLINIC
Mayo Medical Laboratories

Laboratory Service Report 1-800-533-1710

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Test	Flag	Results	Unit	Reference Value	Perform Site*
Transcribed by: mls 6/6/2013 17:07:24					
IDH1/IDH2 Genes, Known Mutations		Performed			MCR
RECEIVED: 06/06/2013 11:51 **REPORTED:** 06/06/2013 17:08					
Slide Review		Performed			MCR
RECEIVED: 06/06/2013 11:51 **REPORTED:** 06/06/2013 17:08					

* Performing Site:

MCR	Mayo Clinic Laboratories - Rochester Main Campus 200 First St SW Rochester, MN 55905	Lab Director: Franklin R. Cockerill, III, M.D.

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