

1-800-533-1710

| PATIENT NAME | | | PATIENT NU | | | AGE 58 | SEX F | ACCESSION # W4075493 |
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| , | | | | L3MRNW4075493 | | | [| |
| ORDERING PHYSICIAN | | | CLIENT ORD | ER # | | | | LIAISONS |
| COLLECTION RECEIVED | | REPORT PRINTED | | SPECIMEN INFORMA | TION | | | |
| 04/21/11 02:02 P | 04/21/11 0 | 2:02 P | 04/25/11 10:19 A | | DATE OF BIRTH: | | | |
| DATE TIME | DATE | TIME | DATE | TIME | | | | |
| Test Client | | | | | | | | |
| Attn: Mayo Liaisons | | | | | | | | |
| 200 First Street SW | | | | | | | | |
| Rochester, MN 55905 | | | | | | | | |
| 507-284-8202 | | | | | | | | |
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LO **REF RANGE** PERFORM SITE * **TEST REQUESTED**

Rapid DNA Extraction Comment

Genomic DNA was

extracted.

REPORTED: 04/21/11 02:44 P

MCR

BTK Gene. Known Mutation

BTK Known Mut Result

REPORTED: 04/21/11 02:56 P

MCR

A heterozygous nonsense mutation was identified in exon 2 (old)/exon 1 (new nomenclature) of the BTK gene (PH domain) - c.37C>T, p.R13X. BTKBASE nomenclature: g.46233 (old), g.100516892 (new); a familial mutation previously identified in a male offspring of this patient.

BTK Known Mut MCR

Interpretation

This result is consistent with carrier status for X-linked Agammaglobulinemia (XLA) for this female. Since the familial mutation has been identified in the BTK gene in this female, genetic testing for this specific mutation in symptomatic male family members and/or female relatives of childbearing age is recommended. Please contact the laboratory at 1-800-533-1710 or the online test catalog at mayomedicallaboratories.com for information about how to order the "BTK Gene, Known Mutation" (89306)

Reviewed By Roshini S. Abraham, **MCR**

Ph.D.

This test was developed and its performance characteristics determined by Laboratory Medicine and Pathology, Mayo Clinic. It has not been cleared or approved by the U.S. Food and Drug Administration.

Fluorescent DNA sequencing was used to test for the presence of a specific mutation in the BTK gene which was previously identified in a family member.

We predict that a small percentage of individuals who have a diagnosis of XLA may have a mutation that is not identified by the methods described above.

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| PATIENT NAME | ORDER STATUS | COLLECTION DATE AND TIME |
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| TESTING, 89306 | Final | 04/21/11 02:02 P |

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1-800-533-1710

| TESTING | | | | PATIENT NUM L3MRNW407 | | | AGE 58 | SEX F | ACCESSION # W4075493 |
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| Test Cli | ent | | | | | | | | |
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| 200 Firs | t Street SW | | | | | | | | |
| Roches | ter, MN 55905 | | | | | | | | |
| 507-284 | I-8202 | | | | | | | | |
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TEST REQUESTED

REF RANGE

The presence of a BTK mutation does not necessarily confirm a diagnosis of XLA. Clinical correlation recommended. Please see: Graziani S, Di Matteo G, Benini L, Di Cesare S, Chiriaco M, Chini L, Chianca M, De lorio F, La Rocca M, Iannini R, Corrente S, Rossi P, Moschese V. Identification of a Btk mutation in a dysgammaglobulinemic patient with reduced B cells: XLA diagnosis or not? Clinical Immunology. 2008; 128: 322-8. And also: Fleisher T and Notarangelo L. What does it take to call it a pathogenic mutation? Clinical Immunology. 2008; 128, 285-6.

 $\ensuremath{\mathtt{A}}$ genetic consultation may be of benefit.

A list of common polymorphisms identified for this patient is available from the lab upon request. CAUTIONS:

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.

Test results should be interpreted in the context of clinical findings, family history, and other laboratory data.

Sequencing Performed MCR

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MCR Mayo Clinic Dpt of Lab Med & Pathology
200 First Street SW Rochester, MN 55905

Lab Director: Franklin R. Cockerill, III, M.D.

| PATIENT NAME | ORDER STATUS | COLLECTION DATE AND TIME |
|----------------|--------------|--------------------------|
| TESTING, 89306 | Final | 04/21/11 02:02 P |