MYD88 Mutation Analysis

MYD88 Mutation Analysis provides targeted detection of mutations in MYD88 gene, including L265P, using DNA extracted from oncology specimens. This test is used for diagnostic, prognostic, and predictive purposes associated with Hematological disorders such as LPL and DLBCL.

Testing Method and Background

This test utilizes amplicon-based targeted **Next Generation Sequencing (NGS) technology** for detection of mutations in MYD88 gene (exons 3-5), including detection of the common MYD88 L265P mutation, using DNA extracted from hematology/oncology specimens. MYD88 L265P mutation has been identified in the majority of patients with Waldenstrom's Macroglobulinemia (WM)/lymphoplasmacytic lymphoma (LPL). MYD88 L265P mutation is also reported in activated B-cell-like (ABC) subtype of diffuse large B-cell lymphoma (DLBCL) at higher rates (30-40%) compared to the germinal center B-cell-like (GCB) subtype of DLBCL (<10%). Detection of MYD88 mutations is helpful in distinguishing LPL from other morphologically similar B-cell lymphoproliferative disorders and is also useful in selecting targeted therapy options (e.g., BTK inhibitors) and monitoring disease progression or response to therapy in individuals diagnosed with LPL.

Highlights of MYD88 Mutation Analysis

Targeted Region

MYD88: Exons 3-5

- **Accurate Results from Low-Quality Samples**
  This assay utilizes workflow with low quantity of input DNA and accurate detection of variants down to 5% mutant allele frequency.
- **Wide-ranging Coverage of Variants**
  Assessment of single-nucleotide variants (SNVs) and small insertions/deletions within multiple target exons

Ordering Information

Get started (non-HFHS): Print a Molecular Hematologic Testing requisition form online at www.HenryFord.com/HFCPD

Get started (HFHS): Order through Epic using test "MYD88 Mutation" (MOL80551 Blood, MOL80552 Bone Marrow)

Specimen requirements:

- Peripheral Blood - 1-3ml in lavender top tube (EDTA) **Specimen stability: Ambient - 72 hours; Refrigerated - 1 week**
- Bone Marrow - 1-3ml, anticoagulated with either heparin or EDTA, **Specimen stability: Refrigerated - 1 week** (ship cold)
- Formalin-fixed, paraffin-embedded tissue, preferably no older than 2 years
- 5-6 tissue sections at 5-6 micron thickness (please include H&E slide and a copy of pathology report)
- Cytology slides (cell block with 500+ tumor cells, submit block or 5-6 tissue sections at 5-10 micron thickness depending on cellularity)
- Extracted DNA - from a CLIA-certified Laboratory

Cause for Rejection: Clotted, hemolyzed, or frozen specimens, improper anticoagulant, tubes not labeled with dual patient identification, non-dedicated tubes.

TAT: 5-10 business days (after Prior Authorization obtained)

Mail test material to:
Henry Ford Center for Precision Diagnostics
Pathology and Laboratory Medicine
Clinic Building, K6, Core Lab, E-655
2799 W. Grand Blvd., Detroit, MI 48202

CPT Codes: 81305, G0452 (88363 or 88381 may apply)

Contact us: Client Services, Account and Billing Set-up, and connect with a Molecular Pathologist at (313) 916-4DNA (4362)

For more information on Comprehensive Molecular Services, visit our website
www.HenryFord.com/HFCPD

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