

500 Chipeta Way, Salt Lake City, Utah 84108-1221

phone: 801-583-2787, toll free: 800-522-2787

Jonathan R. Genzen, MD, PhD, Chief Medical Officer

Patient Age/Sex: 46 years Male

**Specimen Collected: 3/11/2026 14:00 MDT**

**Multiple Myeloma MRD Spectral Flow** | Received: 3/11/2026 14:01 MDT | Report/Verified: 5/12/2026 11:33 MDT

Procedure	Result	Units	Reference Interval
MM MRD Interpretation	See Note <sup>f1 i1</sup>		

**Result Footnote**

f1: MM MRD Interpretation  
 SAMPLE: Bone Marrow  
 INTERPRETATION:  
 POSITIVE for plasma cell neoplasm by flow cytometry, accounting for 0.19% of viable leukocytes (see comment).  
 COMMENT:  
 An abnormal plasma cell population is identified.  
 Note that flow cytometry typically underestimates the plasma cell fraction and correlation with morphology and immunohistochemistry of the core biopsy is recommended to determine the true disease burden. The lower limit of detection for this assay is estimated to be 0.00068%.  
 ANALYSIS:  
 Number of viable cell events collected: 2,055,351  
 Plasma cells percentage of viable cells: 0.21%  
 Atypical Plasma cells: 89% of total PCs  
 Overall plasma cell kappa:lambda ratio: approx. 18:1  
 Viability: 99%  
 Antigens Examined: cKappa, cLambda, CD13, CD19, CD20, CD27, CD28, CD33, CD38, CD45, CD54, CD56, CD81, CD117, CD138, CD200, cIRF4, cVS38c, ViaKrome 808  
 Number of markers assessed:19  
 Light Chain: cKappa High  
 cIRF4: Intermediate  
 cVS38c: High  
 CD13: Aberrant Low  
 CD19: Aberrant Absent  
 CD20: Absent  
 CD27: Aberrant Decreased  
 CD28: Absent  
 CD33: Aberrant Absent to Low  
 CD38: Intermediate  
 CD45: Aberrant Decreased to Absent  
 CD54: Intermediate  
 CD56: Aberrant Intermediate to High  
 CD81: Aberrant Decreased to Absent  
 CD117: Aberrant Low  
 CD138: Variable  
 CD200: Low  
 This result has been reviewed and approved by [REDACTED]

**Test Information**

i1: MM MRD Interpretation  
 INTERPRETIVE INFORMATION: Multiple Myeloma MRD  
 by Flow Cytometry

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

\*=Abnormal, #=Corrected, C=Critical, f=Result Footnote, H-High, i-Test Information, L-Low, t-Interpretive Text, @=Performing lab

*Unless otherwise indicated, testing performed at:*

**ARUP Laboratories**

500 Chipeta Way, Salt Lake City, UT 84108

Laboratory Director: Jonathan R. Genzen, MD, PhD

**ARUP Accession:** 26-070-900071

**Report Request ID:** 20947333

**Printed:** 5/12/2026 12:13 MDT

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**ARUP LABORATORIES | aruplab.com**

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**PATIENT REPORT**

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