MAYO CLINIC LABORATORIES

1-800-533-1710

MPNCM

Myeloproliferative Neoplasm, CALR with Reflex to MPL, Varies

Patient ID	Patient Name		Birth Date	Gender	Age
SA00100564	TESTINGRNV, REPORT		1999-11-11	M	17
Order Number	**Client Order Number**	**Ordering Physician**	**Report Notes**		
SA00100564	SA00100564	CLIENT, CLIENT			
Account Information		**Collected**			
C7028846 DLMP Rochester		08 Nov 2017 06:00			

MPN (CALR, MPL) Reflex

MPNCM Reflex Result MCR

see interpretation

Specimen Type MCR

Peripheral blood

Final Diagnosis [1] MCR

Peripheral blood, CALR mutation analysis, exon 9:
Negative. No deletion or insertion was detected in CALR, exon 9.

Method Summary - CALR : Exon 9 of CALR was amplified from genomic DNA by polymerase chain reaction (PCR). The size of the PCR product was analyzed by capillary electrophoresis on the ABI 3130xl Genetic Analyzer. The analytic sensitivity of this assay is approximately 6% for the majority of CALR mutations and is approximately 20% for the rare type 1-bp deletion (See Mayo Medical Laboratories Interpretive Handbook for details).

Peripheral blood, MPL exon 10 mutation analysis:
Negative. No mutation was detected in MPL, exon 10.

Method summary - MPL exon 10 mutation analysis: Genomic DNA was extracted and Sanger sequencing used to evaluate for mutations in MPL, exon 10 (see Mayo Medical Laboratories Interpretive Handbook for method details). The sensitivity of this assay is approximately 20%, such that samples containing lower percentages of mutated DNA will appear negative.

Comment:
Negative results for CALR exon 9 and MPL exon 10 mutations do not exclude the possibility of a myeloproliferative neoplasm. Correlation with clinical and morphologic findings is recommended for a definitive diagnosis. Samples containing mutations in these genes at levels below the analytical sensitivity of each assay may not be detected by these methods. If clinical suspicion is high for polycythemia vera and JAK2V617F (JAK2B, JAK2M, or JAK2V) was tested negative, JAK2 Exon 12 analysis could be considered (JAKXB or JAKXM).

Signing Pathologist: Melissa Tricker-Klar

Received: 08 Nov 2017 16:15 **Reported:** 08 Nov 2017 17:20

Laboratory Notes

[1] This test was developed and its performance characteristics determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the U.S. Food and Drug Administration.

Performing Site Legend

Code	Laboratory	Address	Lab Director	CLIA Certificate
MCR	Mayo Clinic Laboratories - Rochester Main Campus	200 First Street SW, Rochester, MN 55905	William G. Morice M.D. Ph.D	24D0404292