MAYO CLINIC LABORATORIES

1-800-533-1710

MPNR

Myeloproliferative Neoplasm, JAK2 V617F with Reflex to CALR and MPL, Varies

Patient ID	Patient Name		Birth Date	Sex	Age
SA00181999	TESTINGRNV, MPNR N		2001-01-01	M	25
Order Number	**Client Order Number**	**Ordering Physician**	**Report Notes**		
SA00181999	SA00181999	CLIENT,CLIENT			
Account Information		**Collected**			
C7028846 DLMP Rochester		28 Oct 2026 00:00			

MPN (JAK2 V617F, CALR, MPL) Reflex

MPNR Result

MCR

see interpretation

Final Diagnosis

[1] MCR

Peripheral blood, JAK2 V617F mutation analysis:
Negative for JAK2 V617F.

Method summary - JAK2 V617F analysis: Quantitative, allele-specific polymerase chain reaction (PCR) assay was performed using extracted genomic DNA to evaluate for the point mutation causing JAK2 V617F. The analytic sensitivity of this assay has been determined at 0.06%.

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. 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.

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. The sensitivity of this assay is approximately 20%, such that samples containing lower percentages of mutated DNA will appear negative.

Comment:
Negative results for JAK2V617F, CALR exon 9, and MPL exon 10 mutations do not exclude the diagnosis of a myeloproliferative neoplasm. Correlation with clinical and morphologic finding 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 there are persistent unexplained erythrocytosis, JAK2 Exon 12 analysis could be considered (JAKXB or JAKXM) to rule out polycythemia vera (PV).

Signing Pathologist: LAUREN SCHULTZ

Received: 28 Oct 2026 06:36 **Reported:** 28 Oct 2026 06:52

Test Environment
LTCSEO Template

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	Nikola Baumann Ph.D.	24D0404292