

NEW TEST UPDATE

NOTIFICATION DATE: October 26, 2009

EFFECTIVE DATE: October 27, 2009

**JAK2 Exon 12 and Other Non-V617F Mutation Detection, Bone Marrow
#20242**

Explanation: Please disregard the #20242 orderable unit code for this assay announced October 20, 2009. This orderable code has been updated to #60025, *JAK2* Exon 12 and Other Non-V617F Mutation Detection, Bone Marrow.

Useful For:

- Aiding in the distinction between a reactive cytosis and a myeloproliferative neoplasm, particularly when a diagnosis of polycythemia is being entertained.
- This is a second-order test that should be used when the test for the *JAK2* V617F Mutation is negative.

METHODOLOGY: Mutation Detection in cDNA using Sanger sequencing.

REFERENCE VALUES: An interpretive report is provided.

SPECIMEN REQUIREMENTS:**Specimen must arrive within 72 hours of collection**

Place 2 mL of bone marrow in a lavender-top (EDTA) tube(s) and send in original VACUTAINER(S). Invert several times to mix. Forward promptly at ambient temperature.

CAUTIONS:

- A positive result is not specific for a particular diagnosis and clinicopathologic correlation is necessary in all cases. A negative result does not exclude the presence of a myeloproliferative or other neoplasm.
- The sensitivity of this assay is much less than that of *JAK2* V617F Mutation Detection. This is because the sequencing technique is required to evaluate for many potential mutations. The sensitive *JAK2* V617F assay should always be performed first, as the *JAK2* mutation burden may be very low in some samples. If *JAK2* V617F Mutation Detection is negative, then this assay should be performed for detection of non-V617F *JAK2* mutations.

NOTE: When #60025, *JAK2* Exon 12 and Other Non-V617F Mutation Detection, Bone Marrow is ordered, #81481/Interpretation and Report will be added at an additional charge.

LIST FEE: \$262.80 for #60025
\$ 79.30 for #81481

CPT CODE: 83891 Isolation of RNA
83902 Reverse Transcription
83898 Amplification by PCR
83904x2 Sequencing, each
83909x2 Separation
83912 Interpretation and Report

ANALYTIC TIME: 5 days

DAY(S) SET-UP: Monday-Friday

TEST DEFINITION

10/26/2009

Code Name

60025 JAK2 Exon 12 Mutation Detection, BM

**** End of Name to order code Report ****

MML MML Test setup information

ORDER CODE	EFF DATE	TC	TITLE	Checking Normals	Print normals (# coded)	Perform Site *
60025	9/22/2009		JAK2 Exon 12 Mutation Detection, BM			MCR
			Transport temp : Ambient <96 hours\Refrig <96 hours OK\Frozen NO			
			20243 Accession Number			
			20244 Referring Pathologist/Physician			
			20245 Ref. Path Address			
			20246 Material			
			20247 Specimen:			
			20248 Microscopic Description			
			20249 Special Studies:			
			20250 Final Diagnosis:			
			20251 Comment:			
			20252 Revision Description:			
			20253 Signing Pathologist			
			20254 Special Procedures			
			20255 SP Signing Pathologist			

(continued next page)

MML MML Test setup information

ORDER CODE	EFF DATE	TC	TITLE	Checking Normals	Print normals (# coded)	Perform Site *
60025	(continued)					
		20256	*Previous Report Follows*			
		20257	Addendum			
		20258	Addendum Comment:			
		20259	Addendum Pathologist:			

*Performing Site Legend

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 MCR Mayo Clinic Dpt of Lab Med & Pathology LAB DIRECTOR: Franklin R. Cockerill, III, M.D.
 200 First Street SW
 Rochester, MN 55905
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*** End of Report ***

MML Messages used as normals

CODE	TEXT
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Total of 0 normals codes

*** End of Report ***



TEST DEFINITION

6/15/2009

ORDER CODE	EFF DATE	TC	TITLE	CHECKING NORMALS	PRINT NORMALS (# CODED)	PERFORM SITE *
81481	5/8/2006		INTERPRETATION AND REPORT			MCR
			TRANSPORT TEMP : AMBIENT\REFRIG OK\FROZEN NO			
			81481 INTERPRETATION AND REPORT			

*PERFORMING SITE LEGEND

MCR MAYO CLINIC DPT OF LAB MED & PATHOLOGY
200 FIRST STREET SW
ROCHESTER, MN 55905

LAB DIRECTOR: FRANKLIN R. COCKERILL, III, M.D.

*** END OF REPORT ***

MML MESSAGES USED AS NORMALS

CODE	TEXT
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TOTAL OF 0 NORMALS CODES

*** END OF REPORT ***

1-800-533-1710

PATIENT NAME TESTING, 20242		PATIENT NUMBER		AGE 32	SEX M	ACCESSION # G9138233
ORDERING PHYSICIAN		CLIENT ORDER #				ACCOUNT # LIAISONS
COLLECTION 10/18/09 11:00 P DATE TIME	RECEIVED 10/19/09 03:32 P DATE TIME	REPORT PRINTED 10/26/09 01:54 P DATE TIME		SPECIMEN INFORMATION DATE OF BIRTH: 6/9/1977		
Test Client Attn: Mayo Liaisons 200 First Street SW Rochester, MN 55905 507-284-8202						

TEST REQUESTED	HI LO	REF RANGE	PERFORM SITE *
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JAK2 Exon 12 Mutation Detection, BM

Accession Number	BR09-178	MCR
Referring Pathologist/Physician	Doctor Test Jr., M.D.	MCR
Ref. Path Address	Methodist Hospital 200 1st Street SW Rochester, MN 55905 507-266-0740	MCR
Material	1 tube BM for JAK2 sequencing testing. SLIDE DISPOSITION:	MCR
Specimen:	A: Bone Marrow	MCR
Final Diagnosis:	JAK2 exons 12-15 mutation analysis: Negative. No mutation was detected in JAK2, exons 12-15. Method summary - JAK2 exons 12-15 mutation analysis: Total RNA was extracted and converted to cDNA, followed by Sanger sequencing of JAK2, exons 12-15 (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 nucleic acid will appear negative.	MCR
Signing Pathologist	10/20/2009 10:40 Interpreted by: Pathologist X. Test, M.D. Report electronically signed by Angie S. Beckel Transcribed by: asa05 10/20/2009 10:40:21	MCR

Interpretation and Report

* Perform Site Legend on last page of report

PATIENT NAME TESTING, 20242	ORDER STATUS Final	COLLECTION DATE AND TIME 10/18/09 11:00 P
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TEST REQUESTED	HI LO	REF RANGE	PERFORM SITE *
Interpretation and Report	Performed		MCR

* PERFORMING SITE

MCR	Mayo Clinic Dpt of Lab Med & Pathology 200 First Street SW Rochester, MN 55905	Lab Director: Franklin R. Cockerill, III, M.D.
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PATIENT NAME TESTING, 20242	ORDER STATUS Final	COLLECTION DATE AND TIME 10/18/09 11:00 P
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