

Specimen Collected: 19-Dec-23 07:57**X-Quant Detection of BCR-ABL1 Minor (p190) | Received: 19-Dec-23 07:57 Report/Verified: 19-Dec-23 07:59**

Procedure	Result	Units	Reference Interval
Quant BCR-ABL1, Minor (p190), Source	Whole Blood		
Quant BCR-ABL1, Minor (p190), Result	Detected * f1 i1		
Quant BCR-ABL1, Minor (p190), Ratio	1.00000	%	
Quant BCR-ABL1, Minor (p190), EER	See Note		

Result Footnote

f1: Quant BCR-ABL1, Minor (p190), Result

Note: the reporting unit (NCN percent) is updated in this BCR-ABL1 minor quantitative testing and is different from that previously reported (NCN) at ARUP. A conversion factor of 100 is suggested when comparing the results. A BCR-ABL1 minor transcript NCN percent of 10 by the new test corresponds approximately to BCR-ABL1 minor transcript NCN of 0.1 previously reported at ARUP.

BCR-ABL1 fusion transcripts (p190 form) were detected by RT-qPCR.

This result has been reviewed and approved by [REDACTED]

Test Information

i1: Quant BCR-ABL1, Minor (p190), Result

INTERPRETIVE INFORMATION: BCR-ABL1, Minor (p190),
Quantitative

INTERPRETATION

This assay quantifies BCR-ABL1 transcripts (e1a2) for diagnosis and ongoing therapeutic monitoring. BCR-ABL1 translocations with BCR breakpoints in the minor breakpoint cluster region result in the p190 fusion protein and are predominantly seen in acute lymphoblastic leukemia (ALL) although they may be present in rare cases of chronic myelogenous leukemia (CML).

METHODS

Total RNA is isolated and converted to cDNA and BCR-ABL1 fusions are quantitated by real-time PCR amplification with primers designed to detect the minor (p190) BCR-ABL1 breakpoint with a fusion between BCR exon 1 and ABL1 exon 2 (e1a2). Each PCR assay includes a standard curve for BCR-ABL1 and the ABL1 control and a BCR-ABL1:ABL1 % ratio is calculated and reported.

ANALYTICAL SENSITIVITY:

The limit of quantitation is 5×10^{-5} BCR-ABL1 /ABL1 transcripts. Low level p190 (minor) fusion transcripts can occasionally be detected below the limit of quantitation to around $10-20 \times 10^{-6}$ BCR-ABL1 /ABL1 transcripts, and these are

*=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: 23-353-900025**Report Request ID:** 18510104**Printed:** 19-Dec-23 10:07

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Patient Age/Sex:

Unknown

Test Information

i1: Quant BCR-ABL1, Minor (p190), Result reported as detected but below the limit of quantitation in samples meeting quality criteria.

LIMITATIONS:

This assay is not appropriate for diagnosis or monitoring of BCR-ABL1 major (p210) transcripts, other transcripts resulting from rare rearrangements or minor (p190) transcripts involving beyond ABL1 exon 2. Low-level positivity with this assay may occur when these major p210 transcripts are present at high levels. The results of this test must always be interpreted in the context of morphologic and other relevant data and should not be used alone for a diagnosis of malignancy.

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

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