

Client: Example Client ABC123 123 Test Drive Salt Lake City, UT 84108 UNITED STATES

Physician: Doctor, Example

Patient: Patient, Example

DOB 12/27/1977 Gender: Female

Patient Identifiers: 01234567890ABCD, 012345

Visit Number (FIN): 01234567890ABCD **Collection Date:** 00/00/0000 00:00

MDM2 Gene Amplification by FISH

ARUP test code 3001301			
MDM2 FISH Result	Not Amplified		
	Controls were run and performed as expected. This result has been reviewed and approved by Cameron Beech, M.D.		
MDM2/CEP12 FISH Ratio	1.1		
Average MDM2 Signal Number per Cell	2.3		
Average CEP12 Signal Number per Cell	2.1		
Total Cell Count	40		
Scoring Method	Manual		
MDM2 FISH Reference Number	OAKS23-19070 E1		
MDM2 FISH Source	R Leg		

H=High, L=Low, *=Abnormal, C=Critical

4848



INTERPRETIVE INFORMATION: MDM2, FISH

Fluorescence in situ hybridization (FISH) analysis for MDM2 gene amplification status was performed on a section from a paraffin-embedded tissue block using differentially labeled fluorescent probes targeting the MDM2 gene and the chromosome 12 centromere (CEP12) (Agilent Technologies). Cells were evaluated from regions of tumor identified on histopathologic review of a matching hematoxylin and eosin-stained section. Controls performed appropriately. Based on the assay performance during test validation, the test is expected to detect MDM2 amplification status correctly in 100 percent of patients. Assay range and limit of detection were generated using normal and known positive cases respectively.

MDM2 amplification (MDM2/CEP12 ratio of 2.0 or greater) is most useful for distinguishing well-differentiated liposarcoma/atypical lipomatous tumor and dedifferentiated liposarcoma from lipoma. However, increased MDM2 gene copy number and, occasionally, amplification may be observed in other tumors with lipomatous differentiation as well as in nonadipocytic tumors. Similarly, MDM2 coamplification (increased copy numbers of MDM2 and CEP12, and MDM2/CEP12 ratio less than 2.0) is a finding that is not specific to liposarcoma and may be seen in benign and malignant adipocytic and nonadipocytic tumors. The findings should be interpreted in the context of clinical and histopathologic findings.

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.

VERIFIED/REPORTED DATES					
Procedure	Accession	Collected	Received	Verified/Reported	
MDM2 FISH Result	23-177-153310	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00	
MDM2/CEP12 FISH Ratio	23-177-153310	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00	
Average MDM2 Signal Number per Cell	23-177-153310	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00	
Average CEP12 Signal Number per Cell	23-177-153310	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00	
Total Cell Count	23-177-153310	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00	
Scoring Method	23-177-153310	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00	
MDM2 FISH Reference Number	23-177-153310	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00	
MDM2 FISH Source	23-177-153310	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00	

END OF CHART

H=High, L=Low, *=Abnormal, C=Critical

Patient: Patient, Example
ARUP Accession: 23-177-153310
Patient Identifiers: 01234567890ABCD, 012345
Visit Number (FIN): 01234567890ABCD
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