Patient ID	Patient Name		Birth Date	Sex	Age
321	HGH, TESTING		1991-05-15	F	33
Order Number	**Client Order Number**	**Ordering Physician**	**Report Notes**		
X100476097	X100476097	UNKNOWN,PROVIDER			
Account Information		**Collected**			
C7028845 DLMP Jacksonville		15 Sep 2024 10:00			

MDM2 (12q15) Amp, FISH, Tissue

Result Summary
MCF

MDM2 amplification negative.

Interpretation
MCF

The MDM2 gene is located on the long arm of chromosome 12. Amplification of MDM2 is a common feature of well differentiated liposarcoma, dedifferentiated liposarcoma and other types of sarcomas. MDM2 FISH test is a useful adjunct to histology for distinguishing liposarcoma from atypical lipomatous tumor. However, increased MDM2 copy number or occasionally amplification may be seen in other tumors with lipomatous differentiation. Co-amplification of MDM2 and the chromosome 12 centromeric region (CEP12) has been observed but it is not specific to liposarcoma and may be seen in other types of benign and malignant tumors. The FISH result should be interpreted in the context of clinical and histological finding for differential diagnosis.

References:
Weaver et al: Modern Pathol 2008, 21:943–949 Erickson-Johnson et al: Mod Pathol 2009, 22:1541–1547 Kashima et al: Mod Pathol 2012, 25:1384–1396 Kimura et al: Int J Clin Exp Pathol 2013, 6:1306–1316

This test was ordered in the context of a Mayo Clinic pathology case (#XX-00–0001), and this result should be interpreted within the context of the pathology report.

Result
MCF

nuc ish(D12Z3x2,MDM2x2)

The MDM2:D12Z3 ratio is 1.00.
Average MDM2 signals per cell is 2.0.
Average D12Z3 signals per cell is 2.0.

Reason for Referral
MCF

r/o Liposarcoma

Specimen
MCF

Tissue, Paraffin

Source
MCF

Test

Tissue ID
MCF

XX-00–0001

Method
MCF

Paraffin embedded tissue slides were prepared and evaluated by a pathologist. FISH was performed using a probe for the MDM2 gene and a probe for the chromosome 12 centromere (CEP12) as a control. A total of 60 cells are analyzed according to the protocol recommended by the manufacturer of the probes and the result is classified as the following:

Ratio	Avg MDM2	Result
≥2.0	≥6.0	MDM2 amplification positive
<2.0	<6.0	MDM2 amplification negative
<2.0	≥6.0	MDM2 and CEP12 Co-amplification
≥2.0	<6.0	Work-up. Count 30 additional

For the work-up, count 30 additional cells and then classify the result as positive, negative or co-amplification according to above criteria. If the ratio is ≥2.0 and the copy number is <6 again, classify as negative.

Disclaimer
MCF

Applicable to Analyte Specific Reagent (ASR) and Laboratory Developed Tests (LDT). This test was developed and its performance characteristics determined by Mayo Clinic in a manner consistent with CLIA requirements. It has not been cleared or approved by the U.S. Food and Drug Administration. This FISH test does not rule out other chromosome abnormalities.

Performing Site Legend

Code	Laboratory	Address	Lab Director	CLIA Certificate
MCF	Mayo Clinic Jacksonville Clinical Lab	4500 San Pablo Rd, Jacksonville, FL 32224	Jeffrey Dlott MD	10D0269502

MAYO CLINIC LABORATORIES

Patient ID	Patient Name		Birth Date	Sex	Age
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X100476097	X100476097	UNKNOWN,PROVIDER			
Account Information		**Collected**			
C7028845 DLMP Jacksonville		15 Sep 2024 10:00			

Released By MCF

SONIA RODRIGUEZ

Received: 16 Sep 2024 09:06 **Reported:** 16 Sep 2024 09:31

Performing Site Legend

Code	Laboratory	Address	Lab Director	CLIA Certificate
MCF	Mayo Clinic Jacksonville Clinical Lab	4500 San Pablo Rd, Jacksonville, FL 32224	Jeffrey Dlott MD	10D0269502