

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

Physician:

**Patient: Patient, Example** 

**DOB** 

**Gender:** Male

**Patient Identifiers:** 01234567890ABCD, 012345

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

## **MLH1 Promoter Methylation**

ARUP test code 3004308

MLH<sub>1</sub> Promoter Methylation

Not Detected

MLH1 promoter methylation was not detected.

TEST INFORMATION: MLH1 Promoter Methylation Paraffin

MLH1 methylation is common in sporadic microsatellite unstable tumors, like colorectal cancer and endometrial cancer, and rarely occurs in Lynch syndrome (hereditary non-polyposis colon cancer or HNPCC). Therefore the presence of MLH1 methylation suggests that the tumor is sporadic and not associated with Lynch syndrome. However, since there have been rare reports of Lynch syndrome-associated MLH1 methylation all results should be interpreted within the clinical context. The lack of MLH1 methylation in a mismatch repair deficient tumor suggests that it may be associated with Lynch syndrome, and germline evaluation is suggested. Finally, low level MLH1 methylation is not reported as positive, since it does not correlate with MLH1 inactivation and microsatellite instability.

METHODOLOGY: DNA is isolated from tumor tissue microdissected from prepared slides. DNA is treated with sodium bisulfite, followed by amplification of a segment of the MLH1 promoter region using methylation specific real-time PCR. The MLH1 methylation level is calculated by comparison to the amplification of a reference gene.

LIMITATIONS: Methylation at locations other than those covered by the primers and probes will not be detected. Results of this test must always be interpreted within the clinical context and other relevant data, and should not be used alone for a diagnosis of malignancy. This test is not intended to detect minimal residual disease.

ANALYTICAL SENSITIVITY: Methylation levels below 10 percent are reported as negative.

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.

Block ID

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

Patient: Patient, Example ARUP Accession: 22-187-119190 Patient Identifiers: 01234567890ABCD, 012345 Visit Number (FIN): 01234567890ABCD Page 1 of 2 | Printed: 7/18/2022 1:46:47 PM

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VERIFIED/REPORTED DATES				
Procedure	Accession	Collected	Received	Verified/Reported
MLH1 Promoter Methylation	22-187-119190	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Block ID	22-187-119190	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