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

Physician: Doctor, Example

Patient: Patient, Example

DOB	4/29/1965
Gender:	Male
Patient Identifiers:	01234567890ABCD, 012345
Visit Number (FIN):	01234567890ABCD
Collection Date:	00/00/0000 00:00

Microsatellite Instability (MSI) HNPCC/Lynch Syndrome by PCR

ARUP test code 3004277

Microsatellite Instability Specimen	See Note
Microsatellite Interpretation	Stable Stable: This patient has a tumor with no detectable instability. This result has been reviewed and approved by

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

	INTERPRETIVE INFORMATION: Microsatellite Instability by PCR CHARACTERISTICS: This assay is designed to detect microsatellite instability (MSI) at five microsatellite loci. MSI analysis is a screening test for identifying individuals suspected of Lynch syndrome (LS), when they present with colorectal (CRC) or endometrial cancer (or less often another cancer type); however, definitive diagnosis of LS is based on results of germline testing (NCCN Clinical Practice Guidelines in Oncology for Genetic/Familial High-Risk Assessment: Colorectal, www.nccn.org). Additionally, MSI status is a biomarker of treatment response to immunotherapy in many cancer types. For specific treatment recommendations please refer to NCCN Clinical Practice Guidelines in Oncology for a specific cancer type (www.nccn.org). METHODOLOGY: Genomic DNA from a tumor specimen and normal tissue is amplified by PCR for five microsatellite markers: BAT-25, BAT-26, MONO-27, NR-21, and NR-24. Fluorescently labeled products are detected and sized by capillary electrophoresis. Patterns of normal and tumor genotypes are compared for each marker and scored as stable or unstable. Microsatellite instability-High (MSI-H) indicates a tumor with instability in two or more mononucleotide microsatellite repeats. MSI-H occurs in approximately 90 percent of CRC from individuals with LS, and in 10-15 percent of sporadic CRC. MSI-Indeterminate indicates a tumor with instability in one of five mononucleotide microsatellite repeats. Since instability in even a single mononucleotide marker can be indicative of a mismatch repeat deficient (dMMR) tumor, correlation with evaluation of Mismatch Repair by Immunohistochemistry (ARUP test code 0049302) is recommended. MSI-Stable (MSS) indicates a lack of microsatellite instability in a tumor. A lack of microsatellite instability would be unusual in CRC from individuals with LS, although it does not completely exclude this possibility. Evaluation of Mismatch Repair by Immunohistochemistry (ARUP test code 0049302) may be helpful in this setting. This interpretation may not apply to tumors other than CRC cancers. The lack of microsatellite instability does not rule out the possibility of other CRC-associated genetic disorders. LIMITATIONS: MSI at markers other than those listed above will not be detected. LIMIT OF DETECTION: 25 percent unstable cells (25 percent tumor content). CLINICAL DISCLAIMER: 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. Genetic counseling is recommended. 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.
Microsatellite Marker BAT-26	Stable
Microsatellite Marker NR-21	Stable

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Microsatellite Marker BAT-25	Stable
Microsatellite Marker MONO-27	Stable
Microsatellite Marker NR-24	Stable
Block ID	HC21-107 A1

VERIFIED/REPORTED DATES

Procedure	Accession	Collected	Received	Verified/Reported
Microsatellite Instability Specimen	22-237-401464	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Microsatellite Interpretation	22-237-401464	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Microsatellite Marker BAT-26	22-237-401464	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Microsatellite Marker NR-21	22-237-401464	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Microsatellite Marker BAT-25	22-237-401464	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Microsatellite Marker MONO-27	22-237-401464	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Microsatellite Marker NR-24	22-237-401464	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Block ID	22-237-401464	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