

**Specimen Collected: 15-Sep-21 10:19****Microsatellite Instability by PCR | Received: 15-Sep-21 10:21 Report/Verified: 15-Sep-21 10:23**

Procedure	Result	Units	Reference Interval
Microsatellite Instability Specimen	Tissue		
Microsatellite	High * t1 f1 i1		
Microsatellite Marker	Unstable *		
BAT-26			
Microsatellite Marker	Unstable *		
NR-21			
Microsatellite Marker	Unstable *		
BAT-25			
Microsatellite Marker	Unstable *		
MONO-27			
Microsatellite Marker	Unstable *		
NR-24			
Block ID	4		

**Interpretive Text**

t1: 15-Sep-21 10:19 (Microsatellite Interpretation)

High: This patient has a tumor with instability in at least 2 of 5 mononucleotide microsatellite repeats.

**Result Footnote**

f1: Microsatellite Interpretation

This result has been reviewed and approved by Yuan Ji, Ph.D.

**Test Information**

i1: Microsatellite Interpretation

INTERPRETIVE DATA: Microsatellite Instability by PCR

Samples from a tumor specimen and normal tissue are amplified by PCR for the 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 (MSI)-High indicates a tumor with instability in two or more mononucleotide microsatellite repeats. MSI-High occurs in approximately 90% of colorectal cancers from individuals with Lynch syndrome, also known as hereditary nonpolyposis colorectal cancer (HNPCC), and in 10-15% of sporadic colon cancer.

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 tumor, we recommend that these results

\* = 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: Tracy I. George, MD

**ARUP Accession:** 21-258-104693**Report Request ID:** 15387085**Printed:** 20-Sep-21 13:36

Page 1 of 2

---

**Test Information**

i1: Microsatellite Interpretation

be analyzed in concert with immunohistochemistry (IHC) staining for mismatch repair proteins(test 0049302).

MSI-Stable indicates a lack of microsatellite instability in a tumor. A lack of microsatellite instability would be unusual in colorectal cancers from individuals with Lynch syndrome (HNPCC), although it does not completely exclude this possibility. Evaluation of mismatch repair deficiency by Microsatellite Instability by Immunohistochemical Stain (0049302) may be helpful in this determination. This interpretation may not apply to tumors other than colon cancers. The lack of microsatellite instability does not rule out the possibility of other colon cancer-associated genetic disorders.

Please correlate with clinical findings. 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.

---

\*=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: Tracy I. George, MD

**ARUP Accession:** 21-258-104693

**Report Request ID:** 15387085

**Printed:** 20-Sep-21 13:36

Page 2 of 2