

**Updated MSI Assay- Molecular
Genetics**
Effective Date: 10/9/23
Molecular Genetics Laboratory

Starting Oct 9th, 2023 the DMCUL Molecular Genetics Laboratory will replace the Promega Microsatellite Instability (MSI v1.2) assay with the Promega Long Mononucleotide Repeat -MSI assay. The Promega MSI 1.2 kit was discontinued in 2023. The LMR-MSI analysis compares allelic profiles from normal and tumor samples utilizing a combination of traditional MSI markers (NR-21, BAT-25, BAT-26 and Mono-27) and new long mononucleotide repeat (LMR) markers (BAT-52, BAT-56, BAT-59 and BAT-60). Cutoffs for the assay remain the same (MSS = no markers unstable; MSI-L = 1 marker unstable; MSI-h = ≥ 2 markers unstable). The LMR markers produce more pronounced fragment length changes which improves the detection of microsatellite instability in cases with more subtle size shifts in traditional MSI markers. Turn-around time (TAT) of results remains unchanged.

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