

Laboratory:

DermPath Molecular Diagnostic Laboratory

Referral Laboratory:

Soft Order Code:

MDPMULTIPROBE

CPT code: 88377

Synonyms:

MultiProbe FISH for Melanoma; FFPE FISH for Melanoma

Offsite Collection:

Submit a formalin-fixed, paraffin-embedded block of the tumor tissue or 4 formalin-fixed, paraffin-embedded (FFPE) unstained sections at 4-micron thickness placed on electrostatic-coated slides and one regular H&E obtained as serial sections are required for FISH. Store at room temperature. Cases with less than 30 tumor cells are not suitable for FISH.

Onsite Collection (UMHS Hospitals Only):

Submit a formalin-fixed, paraffin-embedded block of the tumor tissue or 4 formalin-fixed, paraffin-embedded (FFPE) unstained sections at 4-micron thickness placed on electrostatic-coated slides and one regular H&E obtained as serial sections are required for FISH. Store at room temperature. Cases with less than 30 tumor cells are not suitable for FISH. Please complete a MiChart test request and submit it with the specimen.

Days Set Up:

Monday - Friday, 8:30am - 5:30pm

Analytic Time:

1 week

Test Methodology:

Fluorescence In Situ Hybridization (FISH)

Reference Range:

*Reference ranges may change over time. Please refer to the original patient report when evaluating results.

Interpretive report provided.

Test Usage:

This test is used to aid in the diagnosis of difficult melanocytic lesions via fluorescence in situ hybridization (FISH) in formalin-fixed, paraffin-embedded tissue specimens. A positive result favors a diagnosis of melanoma while a negative result one of nevus. Published data report a sensitivity of 86-100% and a specificity of 76-98% for the diagnosis of melanoma in selected cohorts including atypical spitzoid neoplasms. In our internal validation series the sensitivity and specificity were 87% and 93% respectively. Three multiprobe FISH panels are available in DermPath Mol Diag Lab. Panel 1 include probes 6p25 (RREB1), 6q23 (MYB), 11q13 (CCND1) and CEP6; panel 2 include 9q21 (CDKN2A) and CEP9; panel 3 include 8q24 (MYC). For full panel FISH test as an example, the FISH is performed on unstained tissue sections with probes (Abbott Molecular) targeting 6p25 (RREB1), 6q23 (MYB), 11q13(CCND1) and CEP6 on one slide and with probes for 9p21 (CDKN2A), CEP9 and 8q24 (MYC) on a second slide. A minimum of 30 cells with visible signals are evaluated for the following parameters: percentage of cells with more than 2 signals per nucleus for 6p25, 11q13 and 8q25, percentage of cells with fewer signals for 6q23 than for CEP6 and percentage of cells with homozygous deletions of 9p21. Nuclei with three or four signals for all probes are considered tetraploid and are excluded from the numerator, but included in the denominator when computing percentages for 6p25 (RREB1, 11q13 (CCND1) and 8q24 (MYC). Homozygous loss of 9p21 is defined by absence of 9p21 and the presence of at least 1 signal for CEP9. A positive result is defined as exceeding the cut-off criteria of any of the probes.

Test Limitations:

This test detects copy number aberrations on specific chromosomal targets (6p25, 6q23, 11q13, 9p21, and 8q24) documented to have high correlation with malignant lesions, however it will not identify the aberrations in other non-targeted chromosomal segments.

Additional Information:

By ordering this test the clinician acknowledges that informed consent has been obtained from the patient as required by applicable state or federal laws. Test includes pathologist interpretation of results billed as a separate additional charge. This test is not available without interpretation.

CPT Code:

88377

Inpatient Fee Code:

EA021

Outpatient Fee Code:

EA021

MLabs Fee Code:

EA021

Pro Fee CPT:

88377-26

Pro Fee Code:

88377.13