MAYO CLINIC LABORATORIES

TEST CHANGE

Notification Date: September 9, 2025
Effective Date: September 9, 2025

Neuro-Oncology Expanded Gene Panel with Rearrangement, Tumor

Test ID: NONCP

Explanation: On the effective date, the Specimen Required will be updated to clarify tissue preferences and standardize amongst molecular tissue assays. Cytology slides will now be an acceptable specimen.

Current Specimen Required	New Specimen Required
This assay requires at least 20% tumor nuclei. -Preferred amount of tumor area with sufficient percent tumor nuclei: tissue 360 mm(2) -Minimum amount of tumor area: tissue 72 mm(2) -If ordered in conjunction with CMAPT / Chromosomal Microarray, Tumor, Formalin-Fixed Paraffin-Embedded, the preferred amount of tissue is 430 mm(2), the minimum amount is 180 mm(2). -These amounts are cumulative over up to 15 unstained slides and must have adequate percent tumor nuclei. -Tissue fixation: 10% neutral buffered formalin, not decalcified -For specimen preparation guidance, see Tissue Requirement for Solid Tumor Next-Generation Sequencing. For this test, 6 mm x 6 mm x 10 slides are preferred: approximate/equivalent to 360 mm(2); with the minimum acceptable of 4 mm x 4 mm x 10 slides: approximate/equivalent to 144 mm(2). **Preferred:** **Specimen Type:** Tissue block **Collection Instructions:** Submit a formalin-fixed, paraffin-embedded tissue block with acceptable amount of tumor tissue. **Acceptable:** **Specimen Type:** Tissue slide **Slides:** 1 stained and 15 unstained **Collection Instructions:** Submit 1 slide stained with hematoxylin and eosin and 15 unstained, nonbaked slides with 5-micron thick sections of the tumor tissue.	**This assay requires at least 20% tumor nuclei.** -Preferred amount of tumor area with sufficient percent tumor nuclei: tissue 360 mm(2) -Minimum amount of tumor area: tissue 72 mm(2) -If ordered in conjunction with CMAPT / Chromosomal Microarray, Tumor, Formalin-Fixed Paraffin-Embedded, the preferred amount of tissue is 430 mm(2), the minimum amount is 180 mm(2). -These amounts are cumulative over up to 15 unstained slides and must have adequate percent tumor nuclei. -Tissue fixation: 10% neutral buffered formalin, not decalcified -For specimen preparation guidance, see Tissue Requirements for Solid Tumor Next-Generation Sequencing. In this document, the sizes are given as 6 mm x 6 mm x 10 slides as preferred: approximate/equivalent to 360 mm(2) and the minimum as 4 mm x 4 mm x 10 slides: approximate/equivalent to 144 mm(2). **Preferred:** Submit 3, if available, or 2 of the following specimens. **Acceptable:** Submit **at least one** of the following specimens. **Specimen Type: Tissue block** **Collection Instructions:** Submit a formalin-fixed, paraffin-embedded tissue block with acceptable amount of tumor tissue. **Specimen Type: Tissue slide** **Slides:** 1 Hematoxylin and eosin-stained and 15 unstained

Note: The total amount of required tumor nuclei can be obtained by scraping up to 15 slides from the same block.
Additional information:
1. If the amount of tissue available is close to the minimum required, the ordering provider may be asked to prioritize between the DNA and RNA components of the assay.
2. Unused unstained slides will not be returned.

Collection Instructions:
Submit the followings slides:
1 Slide stained with hematoxylin and eosin
AND
10 Unstained, nonbaked slides with 5-micron thick sections of the tumor tissue.
Note: The total amount of required tumor nuclei can be obtained by scraping up to 15 slides from the same block.
Additional Information: Unused unstained slides will not be returned.

Specimen Type: Cytology slide (direct smears or ThinPrep)
Slides: 1 to 3 Slides
Collection Instructions: Submit 1 to 3 slides stained and coverslipped with a total of 5000 nucleated cells (preferred) or at least 3000 nucleated cells (minimum).
Note: Glass coverslips are preferred; plastic coverslips are acceptable but will result in longer turnaround times.
Additional Information: Cytology slides will not be returned. An image of the slides will be stored per regulatory requirements.

Questions

Contact Michelle Raths, Laboratory Resource Coordinator at 800-533-1710.