

## MayoComplete Lung Cancer-Targeted Gene Panel with Rearrangement, Tumor

Test ID: MCLNG

**Explanation:** On the effective date, the Specimen Required will be updated to clarify tissue preferences and standardize amongst molecular tissue assays. This update will not affect assay-specific acceptance criteria.

Current Specimen Required	New Specimen Required
<p><b>This assay requires at least 20% tumor nuclei.</b></p> <ul style="list-style-type: none"> <li>-Preferred amount of tumor area with sufficient percent tumor nuclei: tissue 360 mm(2)</li> <li>-Minimum amount of tumor area: tissue 72 mm(2)</li> <li>-These amounts are cumulative over up to 15 unstained slides and must have adequate percent tumor nuclei.</li> <li>-Tissue fixation: 10% neutral buffered formalin, not decalcified</li> <li>-For specimen preparation guidance, see <a href="#">Tissue Requirements for Solid Tumor Next-Generation Sequencing</a>. In this document, the sizes are given as 4 mm x 4 mm x 10 slides as preferred: approximate/equivalent to 144 mm(2) and the minimum as 3 mm x 1 mm x 10 slides: approximate/equivalent to 36mm(2)</li> </ul> <p><b>Preferred:</b>  <b>Specimen Type: Tissue block</b>  <b>Collection Instructions:</b> Submit a formalin-fixed, paraffin-embedded tissue block with acceptable amount of tumor tissue.</p> <p><b>Acceptable:</b>  <b>Specimen Type: Tissue slides</b>  <b>Slides:</b> 1 Stained and 15 unstained  <b>Collection Instructions:</b> Submit 1 slide stained with hematoxylin and eosin and 15 unstained, nonbaked slides wit 5-micron thick sections of the tumor tissue.  <b>Note:</b> The total amount of required tumor nuclei can be obtained by scraping up to 15 slides from the same block.  <b>Additional Information:</b> Unused unstained slides will not be returned.</p>	<p><b>This assay requires at least 20% tumor nuclei.</b></p> <ul style="list-style-type: none"> <li>-Preferred amount of tumor area with sufficient percent tumor nuclei: tissue 360 mm(2)</li> <li>-Minimum amount of tumor area: tissue 72 mm(2)</li> <li>-These amounts are cumulative over up to 10 unstained slides and must have adequate percent tumor nuclei.</li> <li>-Tissue fixation: 10% neutral buffered formalin, not decalcified</li> <li>-For specimen preparation guidance, see <a href="#">Tissue Requirements for Solid Tumor Next-Generation Sequencing</a>. In this document, the sizes are given as 4 mm x 4 mm x 10 slides as preferred: approximate/equivalent to 144 mm(2) and the minimum as 3 mm x 1 mm x 10 slides: approximate/equivalent to 36 mm(2)</li> </ul> <p><b>Preferred:</b> Submit 3, if available, or 2 of the following specimens.  <b>Acceptable:</b> Submit <b>at least one</b> of the following specimens.</p> <p><b>Specimen Type: Tissue block</b>  <b>Collection Instructions:</b> Submit a formalin-fixed, paraffin-embedded tissue block with acceptable amount of tumor tissue.</p> <p><b>Specimen Type: Tissue slide</b>  <b>Slides:</b> 1 Hematoxylin and eosin-stained and 10 unstained  <b>Collection Instructions:</b>            Submit the followings slides:            1 Slide stained with hematoxylin and eosin            AND</p>

**Specimen Type: Cytology slides** (direct smears or ThinPrep)

**Slides:** 2 to 4 Slides

**Collection Instructions:** Submit 2 to 4 slides stained and coverslipped with a preferred total of 10,000 nucleated cells, or a minimum of at least 3000 nucleated cells.

**Note:** Glass coverslips are preferred; plastic coverslips are acceptable but will result in longer turnaround times.

**Additional Information:** Cytology slides will not be returned.

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 10 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 Rath, Laboratory Resource Coordinator at 800-533-1710.