

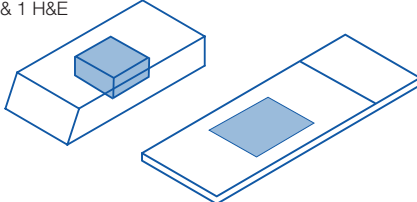
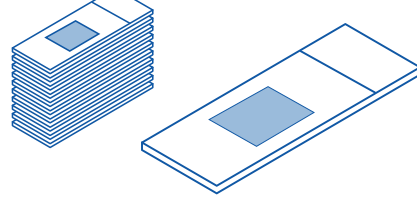
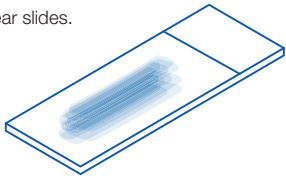
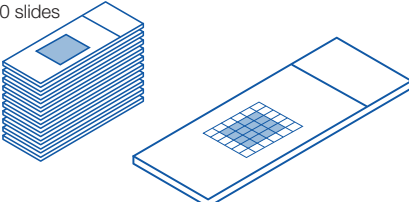
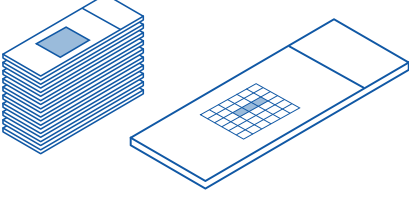
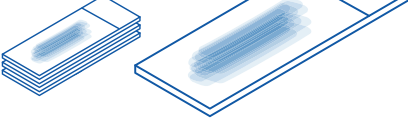
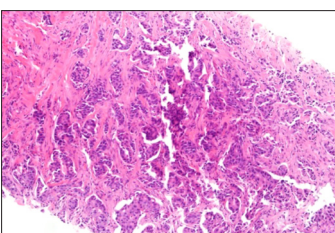
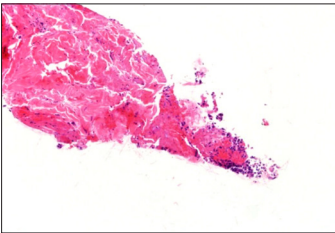
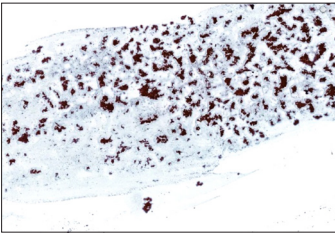
TISSUE REQUIREMENTS FOR SOLID TUMOR NEXT-GENERATION SEQUENCING

The following specimen requirements ensure testing can proceed without delay and increases the likelihood of successfully generating sequencing results.

ACCEPTABLE SAMPLES

Preliminary or final pathology reports should accompany all specimens.

1. Formalin-fixed, paraffin-embedded (FFPE) tissue
 - Tissue should be fixed in 10% neutral-buffered formalin. Other fixatives not acceptable unless otherwise noted.
 - Decalcified specimens are not acceptable.
2. Cytology smears*
 - Slides prepared from fine needle aspirations or touch preps.
 - Slides prepared from Thin Prep.
 - Plastic coverslips not preferred and require extra processing time.

SAMPLE TYPES	TISSUE SIZE AND TOTAL CELL REQUIREMENTS**	TUMOR NUCLEI PERCENTAGE**
<p>ACCEPTABLE SAMPLES Tissue block, FFPE & 1 H&E</p>  <p style="text-align: center;">OR</p> <p>10 unstained slides from one block, unbaked and 5 microns thick & 1 H&E.</p>  <p style="text-align: center;">OR</p> <p>Cytology smear slides.</p> 	<p>FFPE: Preferred: 4mm x 4mm, 10 slides</p>  <p style="text-align: center;">OR</p> <p>Minimum: 3mm x 1mm, 10 slides</p>  <p style="text-align: center;">OR</p> <p>Cytology: Minimum: 3,000 cells Preferred: 5,000 cells Up to 3 slides can be used to meet cellular requirements.</p> 	<p>10-30% required*** Percent tumor nuclei = number of tumour cells divided by total number of all cells with nuclei.</p>  <p>Example of core biopsy with sufficient total cells and tumor cells.</p>  <p>Example of core biopsy with insufficient total cells and tumor cells.</p>  <p>Example of cytology smear with sufficient total cells and tumor cells.</p>

*Cytology smears not accepted for test codes NONCP or NTRK

**The Neuro-Oncology Expanded Gene Panel with Rearrangement (Mayo ID: NONCP) and MayoComplete Solid Tumor Panel (Mayo ID: MCSTP) include both RNA and DNA analysis and require a greater amount of tissue and higher tumor percentage. See our test catalog for complete details.

***Percentage depends on assay; refer to the assay's specimen requirements section on the test catalog.