



Test Definition: POLET

POLE Mutation Analysis, Next-Generation Sequencing, Tumor

Reporting Title: POLE Mutation Analysis, Tumor

Performing Location: Mayo Clinic Laboratories - Rochester Main Campus

Ordering Guidance:

Multiple oncology (cancer) gene panels are available. For more information see [Hematology, Oncology, and Hereditary Test Selection Guide](#).

Necessary Information:

A pathology report (final or preliminary), at minimum containing the following information, **must accompany specimen** for testing to be performed:

1. Patient name
2. Block number-must be on all blocks, slides, and paperwork (can be handwritten on the paperwork)
3. Tissue collection date
4. Source of the tissue

Specimen Requirements:

This assay requires at least 20% tumor nuclei.

- Preferred amount of tumor area with sufficient percent tumor nuclei: tissue 216 mm²)
- Minimum amount of tumor area: tissue 36 mm²)
- These amounts are cumulative over up to 10 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](#). In this document, the sizes are given as 4 mm x 4 mm x 10 slides as preferred: approximate/equivalent to 144 mm²) and the minimum as 3 mm x 1 mm x 10 slides: approximate/equivalent to 36 mm²).

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 10 unstained

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 10 slides from the same block.

Additional Information: Hematoxylin and eosin-stained and 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.

Forms:

If not ordering electronically, complete, print, and send an [Oncology Test Request](#) (T729) with the specimen.

| Specimen Type | Temperature | Time | Special Container |
|---------------|---------------------|------|-------------------|
| Varies | Ambient (preferred) | | |
| | Refrigerated | | |

Result Codes:

| Result ID | Reporting Name | Type | Unit | LOINC® |
|-----------|------------------------|--------------|------|---------|
| 619677 | Result | Alphanumeric | | 82939-0 |
| 619678 | Interpretation | Alphanumeric | | 69047-9 |
| 619679 | Additional Information | Alphanumeric | | 48767-8 |
| 619680 | Specimen | Alphanumeric | | 31208-2 |
| 619681 | Tissue ID | Alphanumeric | | 80398-1 |
| 619682 | Method | Alphanumeric | | 85069-3 |
| 619683 | Disclaimer | Alphanumeric | | 62364-5 |
| 619684 | Released By | Alphanumeric | | 18771-6 |

LOINC® and CPT codes are provided by the performing laboratory.

Supplemental Report:

No

CPT Code Information:

88381-Microdissection, manual

81479

Reflex Tests:

| Test Id | Reporting Name | CPT Units | CPT Code | Always Performed | Available Separately |
|---------|--------------------|-----------|----------|------------------|----------------------|
| SLIRV | Slide Review in MG | 1 | 88381 | Yes | No, (Bill Only) |

Reference Values:

An interpretive report will be provided.