

2002440 EGFR Mutation Detection by Pyrosequencing**EGFR PCR**

Specimen Required: Patient Prep: For a general FNA collection and smear preparation refer to ARUP's Laboratory Test Directory: Cytology, Fine Needle Aspiration Collection at <http://ltd.aruplab.com/tests/pdf/366>

Collect: Tumor tissue. **Also acceptable: DNA extracted by CLIA certified lab with corresponding client-circled H&E slide.**

Specimen Preparation: Tumor Tissue: Formalin fix (10 percent neutral buffered formalin) and paraffin embed tissue. Protect from excessive heat. Tissue block will be returned after testing. Transport tissue block or 5 unstained 5-micron slides. (Min: 3 slides)

Fine Needle Aspirate (FNA): Prepare FNA smear with Diff-Quik or equivalent stain by standard methods (air-dried slides are preferred). Number of slides needed is dependent on the tumor cellularity of the smear. (Min: 1 slide). Slide(s) will be destroyed during testing process and will not be returned to client. Transport block and/or slide(s) in a tissue transport kit (ARUP Supply #47808) available online through eSupply using ARUP Connect™ or contact ARUP Client Services at (800) 522-2787.

Extracted DNA: Transport 40 uL DNA with at least 50 ng/uL concentration. (Min: 40 uL) Transport DNA in a tissue transport kit (ARUP Supply #47808) available online through eSupply using ARUP Connect™ or contact ARUP Client Services at (800) 522-2787.

Storage/Transport Temperature: Room temperature. Also acceptable: Refrigerated. Ship in cooled container during summer months.

Extracted DNA: Refrigerated.

Unacceptable Conditions: Less than 25 percent tumor. **DNA extracted by a non-CLIA lab. DNA extracted without a corresponding circled H&E slide.** Specimens fixed/processed in alternative fixatives (alcohol, Prefer) or heavy metal fixatives (B-4 or B-5). Decalcified specimens. FNA smears with less than 50 tumor cells.

Stability (collection to initiation of testing): Ambient: Indefinitely; Refrigerated: Indefinitely; Frozen: Unacceptable

Extracted DNA: Ambient: 1 month; Refrigerated: Indefinitely; Frozen: Indefinitely

Note: This test detects mutations in *EGFR* exons 18, 19, 20 and 21 (codons 719, 745-753, 768, 790, 858, and 861).