TEST CHANGE

DNA Cell Cycle Analysis - Ploidy and S-Phase

0095155, DNA MISC

Specimen Requirements:	
Patient Preparation:	
Collect:	Tumor tissue. Peripheral blood in lavender (EDTA, pink (K2EDTA), or green (sodium or lithium heparin). Bone marrow in green (sodium or lithium heparin).
Specimen Preparation:	Tissue: Paraffin-embedded tissue block enriched with tumor OR Peripheral Blood: Transport 5 mL (Min: 1 mL) with Wright's stained slide OR Bone marrow: Transport 2 mL (Min: 1 mL) with Wright's stained slide. ~~New York State Clients: Formalin-fixed, paraffin-embedded tissue.~~
Transport Temperature:	Tissue (paraffin embedded), peripheral blood with Wright's stained slide, or bone marrow with Wright's stained slide: Refrigerated or room temperature.
Unacceptable Conditions:	Products of conception. No tumor tissue remaining on block. Specimens fixed in Bouin's solution (picric acid), mercuric chloride containing fixatives (e.g., B5, Zenker's solution) or ethanol-based fixatives containing ethylene glycol, acetic acid, or zinc chloride. Clotted or hemolyzed whole blood or bone marrow. Decalcified specimens.
Remarks:	Provide the clinical information (pathology report) and specimen source. If multiple specimens (blocks or slides) are sent to ARUP, they must be accompanied by one of the following: an order comment indicating that the ARUP pathologist should choose the specimen most appropriate for testing (e.g., "Choose best block"), or individual orders for each sample submitted. A Pathologist Block Selection Fee (ARUP test code 3002076) will be added to orders that utilize the first option. If multiple specimens are sent to ARUP without a request for pathologist block/slide selection or individual orders, they will be held until clarification is provided.
Stability:	Tissue (paraffin embedded): Ambient: Indefinitely; Refrigerated: Indefinitely; Frozen: Unacceptable Peripheral blood with Wright's stained slide or bone marrow with Wright's stained slide: Ambient: 48 hours; Refrigerated: 48 hours; Frozen: Unacceptable
Methodology:	Qualitative Flow Cytometry
Note:	This test is suitable for all tumor tissue specimens (including prostate, colon, and breast) except products of conception. For products of conception testing, please refer to Products of

	Conception, Ploidy by Flow Cytometry (ARUP test code 2006178). A thin section of each tissue submitted is stained with H&E to verify the presence of tumor. The DNA content of each tumor is classified as diploid, near-diploid, tetraploid, aneuploid, hypertetraploid, or hypodiploid. The DNA index is the ratio of tumor G0-G1 cells to normal G0-G1 cells. The tumor-specific S-phase is used when possible. An average histogram S-phase is used for diploid, near-diploid, and hypodiploid tumors where the tumor and host S-phases cannot be separated. An average histogram S-phase is also used when the percentage of aneuploid cells in the histogram is low (less than 25 percent).
CPT Codes:	88182
New York DOH Approval Status:	Specimens from New York clients will be sent out to a New York DOH approved laboratory, if possible.

Interpretive Data:

The diagnostic and prognostic importance of tumor DNA content depends on the tumor type and source of tissue. Interpretative information, if available for the tumor type, is included with the DNA histogram.

Reference Interval:

Refer to report