



Test Catalog

Diagnostic. Prognostic. Predictive. Predisposition.





Oncology Chromosome Analysis

Alternative Name

Oncology Cytogenetics, Oncology Karyotyping

Methodology

Cytogenetics

Test Description

Cytogenetic analysis can provide an important clinical understanding for diagnosis, prognosis, and available therapies in a wide variety of hematologic and solid tumors. Chromosomal changes can consist of additions and deletions of whole chromosomes or structural changes such as insertions, inversions, translocations, and deletions. Chromosomal deletions are a common karyotypic change seen in solid tumors, creating a disruption of gene functionality thus leading to malignant disease. In leukemias and lymphomas, chromosomal translocations are identified as a common karyotypic change aiding in disease diagnosis.

Clinical Significance

In some forms of cancer, especially hematological neoplasms, cytogenetic analysis can determine whether chromosomal changes, either structural or numerical, are present in the malignant cells, thereby facilitating diagnosis, prognosis and treatment options.

Specimen Requirements

- **BM Aspirate:** 1-2 mL sodium heparin tube.
- **Peripheral Blood:** 2-5 mL sodium heparin tube.
- **Fresh/Unfixed Tissue - Lymph Node or Solid Tumor Tissue Biopsy:** One thin cross-section of fresh node or one representative section of solid tumor with minimum 0.5 cm³ tissue. Collect under sterile conditions as if for microbiologic culture. Place tissue in RPMI and note type of tissue on test requisition. Lymph nodes may be sent to our Aliso Viejo, CA or Nashville, TN facility. Send solid tumor samples to the Nashville, TN facility. Please see our contact page for shipping address. Tissues placed in formalin are unacceptable for cytogenetics.
- **Note:** Please exclude biopsy needles, blades, and other foreign objects from transport tubes. These can compromise specimen viability and yield, and create hazards for employees.

Storage & Transportation

Do not freeze. Use cold pack for transport, make sure cold pack is not in direct contact with specimen.

CPT Code(s)*

88237, 88264, 88291. Some cases require additional study and may use 88280, 88285 and/or an additional 88237

New York Approved

Yes

Level of Service

Global

Turnaround Time

Bone marrow aspirate/blood: 6 days (standard; 8 days for known or suspected plasma cell neoplasm) | Lymph node/node biopsy: 6 days | Solid tumor: 21 days

References

1. Sandberg AA. Cancer cytogenetics for clinicians. American Cancer Society Journals. <https://acsjournals.onlinelibrary.wiley.com/doi/abs/10.3322/canjclin.44...> Published December 31, 2008. Accessed January 11, 2021.

*The CPT codes provided with our test descriptions are based on AMA guidelines and are for informational purposes only. Correct CPT coding is the sole responsibility of the billing party.

Please direct any questions regarding coding to the payor being billed.

NeoGenomics Laboratories is a specialized oncology reference laboratory providing the latest technologies, testing partnership opportunities, and interactive education to the oncology and pathology communities. We offer the complete spectrum of diagnostic services in molecular testing, FISH, cytogenetics, flow cytometry, and immunohistochemistry through our nation-wide network of CAP-accredited, CLIA-certified laboratories.

Committed to research as the means to improve patient care, we provide Pharma Services for pharmaceutical companies, in vitro diagnostic manufacturers, and academic scientist-clinicians. We promote joint publications with our client physicians. NeoGenomics welcomes your inquiries for collaborations. Please contact us for more information.

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