



Test Catalog

Diagnostic. Prognostic. Predictive. Predisposition.



T-Cell Receptor Beta Gene Rearrangement

Alternative Name

T-Cell Clonality Assessment (Beta)

Methodology

Molecular

Test Description

This test provides qualitative detection of monoclonal T-cell receptor (TCR) beta gene rearrangements by PCR and fragment analysis according to BIOMED-2 consensus primer design. This test may be ordered concurrently with or after negative results in our [T-Cell Receptor Gamma Gene Rearrangement](#) assay for gamma gene rearrangements to improve TCR rearrangement detection by ~10% in T-cell leukemias/lymphomas.

Clinical Significance

T-cell receptor (TCR) gene rearrangement analysis is commonly used for determining clonality in the diagnostic evaluation of T-cell lymphomas and leukemias. TCR gamma gene ([tested separately](#)) and beta gene rearrangement analysis (as provided in this test) together will detect most clonal TCR rearrangements in patients with T-cell lymphomas/leukemias. Results should be interpreted in clinical context for diagnosis of T-cell lymphoproliferative disorders.

Specimen Requirements

- **Peripheral blood:** 5 mL in EDTA tube.
- **Bone marrow:** 2 mL in EDTA tube.
- **FFPE tissue:** Paraffin block with at least 5mm² of tissue size is preferred. Alternatively, send 1 H&E slide plus 4-5 unstained slides cut at 5 or more microns. Please use positively-charged slides and 10% NBF fixative. Do not use zinc fixatives.
- **Fresh tissue:** Two pieces minimum, 0.2 cm³ in RPMI. Note: not suitable for Freeze & Hold option.
- **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.

Note: Test in DNA-based, suitable for Freeze & Hold option, except for Fresh Tissue samples.

Storage & Transportation

For fresh specimens, use cold pack for transport. Make sure cold pack is not in direct contact with specimen.

CPT Code(s)*

81340

New York Approved

Yes

Level of Service

Global

Turnaround Time

7 days

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.

*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.



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Rev. 050324