
Lab Dept: **Anatomic Pathology**

Test Name: **GENE REARRANGEMENT, T&B CELLS BLOOD**

General Information

Lab Order Codes: GRB

Synonyms: Gene-T; T-Cell Receptor Rearrangement; Gene-B; Immunoglobulin Gene Rearrangement

CPT Codes: 81261 – IGH@, gene rearrangement analysis to detect abnormal clonal populations; amplified methodology
81342 – TRG@, gene rearrangement analysis, evaluation to detect abnormal clonal populations

Test Includes: T-cell receptor gamma chain rearrangement by PCR. TCR beta chain by PCR per request. TCR beta, gamma or delta chains by Southern transfer per request at an additional charge.

B-Cell: Immunoglobulin heavy chain (JH Framework 2 and 3) rearrangement. JH and kappa (CK) or lambda light chain by Southern transfer when requested at an additional charge.

Logistics

Test Indications: Evaluation for clonal rearrangement of T-cell receptor genes and adjunct in diagnosing lymphomas and leukemias of T-cell lineage.

Evaluation for clonal rearrangements of the immunoglobulin heavy chain as an adjunct in diagnosing lymphoma and leukemia of B-cell lineage.

Lab Testing Section: Anatomic Pathology - Sendouts

Referred to: Fairview University Diagnostic Laboratories

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: For best results, specimens should arrive by 2:00 PM Friday.

Turnaround Time: Results are available within 7-14 days.

Special Instructions: Indicate on request form if Southern transfer technique is desired

Specimen

Specimen Type:	Whole blood
Container:	Yellow top (ACD Solution A) tube Alternate container: Lavender top (EDTA) tube
Draw Volume:	10 mL (Minimum: 5 mL) blood
Processed Volume:	Same as Draw Volume
Collection:	Routine venipuncture Contact Molecular Diagnostic Laboratory prior to specimen collection
Special Processing:	Lab Staff: Store at room temperature. Do Not freeze. Contact laboratory prior to shipping. Ship blood at room temperature to arrive within 24-hours. Specimens collected over the weekend should be forwarded to Fairview for storage. Forward promptly.
Patient Preparation:	None
Sample Rejection:	Clotted blood; frozen specimen; mislabeled or unlabeled specimens

Interpretive

Reference Range:	Results are reported as negative (germline or no rearrangement noted) or positive (clonal rearrangement indicating clonal cell populations present). Correlations with immunophenotypic, histopathologic, and cytogenetic data will be included with the interpretation of the molecular data when available
Critical Values:	N/A
Limitations:	N/A
Methodology:	Amplification of DNA and confirmation by RFLP (restriction fragment length polymorphism) analysis using Southern transfer technique when appropriate
References:	Fairview University Diagnostic Laboratory Web Page http://labguide.fairview.org/diagnostic.asp January 2012
Updates:	1/18/2006: CPT 2006 updates 1/10/2007: CPT 2007 updates 2/6/2013: CPT 2013 updates