

Immunoglobulin Gene Rearrangement, Tissue

Test ID: BCGET; performed at Mayo Clinic Laboratories Florida.

Useful for:

Determining whether a B-cell or plasma cell population is polyclonal or monoclonal using paraffin-embedded specimens.

Identifying neoplastic cells as having B-cell or plasma cell differentiation.

Monitoring for a persistent neoplasm by detecting an immunoglobulin gene rearrangement profile similar to that from a previous neoplastic specimen.

Methods:

Polymerase Chain Reaction (PCR)

Reference Values:

An interpretive report will be provided

Specimen Requirements:

Specimen Type: Paraffin-embedded bone marrow aspirate clot or paraffin-embedded tissue **Container/Tube:** Paraffin block **Specimen Volume:** Minimum of 4 slides, 10 um preferred

Specimen Stability Information:

| Specimen Type | Temperature | Time |
|------------------|---------------------|------|
| Tissue, Paraffin | Ambient (preferred) | |
| | Refrigerated | |

Cautions:

This test is neither 100% sensitive nor 100% specific.

False-negative results may occur if the immunoglobulin gene has numerous point alterations introduced during expansion in a follicle center (somatic hypermutation) such that none of the polymerase chain reaction primers will bind. False-negative results will occur if the clonal cells have not rearranged the immunoglobulin genes

being evaluated or are present below the sensitivity level of the assay (sensitivity is quite variable but the assay requires that at least 1% to 5% of the nucleated cells present be clonal). False-positive results are rare but may occur if a predominant clone (or small number of clones) is produced or sampled from a polyclonal expansion.

This test does not provide information regarding:

-The differentiation of the clonal cell population (neoplastic cells other than B cells or plasma cells may occasionally have Ig gene rearrangements)

-Whether a prominent clone is physiologic or neoplastic

CPT Code:

81261 81264

Day(s) Performed: Monday through Friday Report Available: 1 to 8 days