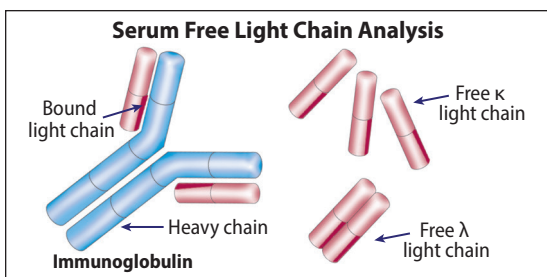


Freelite®

Freelite is a test that measures the amount of free kappa (κ) and free lambda (λ) light chain protein in the blood. It is recommended in the clinical guidelines of the International Myeloma Working Group (IMWG) and the National Comprehensive Cancer Network (NCCN). If a doctor suspects myeloma, Freelite should be ordered together with serum protein electrophoresis (SPEP).

- Normal plasma cells in the bone marrow make light chain and heavy chain proteins to help fight infection. When bound together, light chains and heavy chains create an immunoglobulin (Ig), also called an antibody, which is then released from the plasma cells into the circulating blood. "Free" light chains are not bound to heavy chains, so they circulate in the blood "free" from heavy chains.



- Myeloma cells are cancerous plasma cells. One myeloma cell makes many clones of itself in the bone marrow. These clonal myeloma cells secrete "monoclonal" heavy and/or light chain protein. The amount of monoclonal free light chains in the blood shows how many active myeloma cells are in a person's bone marrow. The normal ranges for Freelite are:
 - Free kappa: 3.3–19.4 mg/L
 - Free lambda: 5.71–26.3 mg/L
 - Kappa/lambda ratio: 0.26–1.65
- If either the kappa or the lambda results are higher than normal AND the kappa/lambda ratio is either too low or too high, this indicates the presence of monoclonal light chains.
- Freelite can be part of routine myeloma testing, and may be one of the earliest lab results to change, telling the doctor if treatment is working.

Freelite is widely available. It is reimbursed by Medicare and most private insurers.



Improving Lives **Finding the Cure®**

Hevylite[®]

Hevylite is a lab test that measures the amount of specific immunoglobulin (Ig) heavy and light chain pairs in the blood (e.g., IgG kappa, IgG lambda, IgA kappa, IgA lambda). These pairs are the full antibody with light chains bound to heavy chains.

- Immunoglobulins are produced by normal plasma cells in the bone marrow to help fight infection. Each immunoglobulin molecule is made up one type of heavy chain bound to one type of light chain. The heavy chain is one of 5 different types: G, A, D, E, or M. The light chains are either kappa (κ) or lambda (λ). Each plasma cell makes only one type of heavy chain and one type of light chain to form a whole immunoglobulin.
- Myeloma cells are cancerous plasma cells. One myeloma cell makes many clones of itself in the bone marrow. These clonal myeloma cells secrete "monoclonal" heavy and/or light chain protein. In general, the more active the myeloma, the more monoclonal protein secreted.
- Hevylite measures the normal immunoglobulin pairs as well as those made by the myeloma cells. It also measures the ratio between normal and myeloma pairs.
- Hevylite can help monitor myeloma during treatment, especially for patients with IgA kappa or IgA lambda myeloma, which is difficult to quantify with standard tests.
- Hevylite may identify residual disease and early relapse.

Hevylite is covered by insurance. For a list of labs that perform this test, email info@thebindingsite.com or call 800-633-4484.

The IMF InfoLine is staffed by
trained information specialists.

800.452.CURE (2873)

in the US & Canada



International
Myeloma
Foundation[®]

12650 Riverside Drive, Suite 206, North Hollywood, CA 91607 USA
818.487.7455 myeloma.org