


Free Light Chains



Synonyms	FLC
Clinical Indication	<p>Investigation and monitoring of B cell dyscrasias, especially light chain only myeloma, MGUS, amyloid.</p> <p>Serum Free Light Chains have a role in the diagnosis of primary systemic amyloidosis (AL) with up to 98% of patients demonstrating abnormal levels.</p> <p>Because of their shorter half-life, FLC may show a quicker response to treatment than intact immunoglobulin.</p> <p>Further investigation of an abnormal band in serum.</p>
Part of Profile / See Also	
Request Form	Combined Pathology manual Blood form or ICE request
Availability / Frequency of Analysis	<p>Analysed if specific criteria met</p> <p>Minimum retesting interval is 3 months, 2 weeks for haematology.</p>
Turnaround Time	One week.
Patient Preparation	None required.
Sample Requirements	
Specimen Type	Serum
Volume	2 ml
Container	 <p>Gold-top (SST) tube (preferred)</p> <p>Plain serum or lithium heparin samples may also be used</p>
Reference Range & Units	<p>Serum kappa FLC 3.3 – 19.4 mg/L</p> <p>Serum lambda FLC 5.7 – 26.3 mg/L</p> <p>Kappa/lambda ratio 0.26 – 1.65</p> <p>Renal impairment reduced FLC clearance. Renal reference range for FLC ratio is 0.37 – 3.10</p>
Interferences	
Interpretation & Clinical Decision Value (if applicable)	Increased levels may be seen with raised polyclonal immunoglobulin, and in renal impairment. Abnormal ratio indicates B cell dyscrasia.

Antigen excess causes all immunoassays to underestimate very high levels of antigen. Free-lite assays are manufactured to minimise antigen excess, but it is not possible to completely eradicate it. Free-lite results should be interpreted in conjunction with other laboratory tests and clinical history.

References

Test code

FLC

Lab Handling

Aliquot and store at 4°C