

Freelite Dot Plot - Installation and User Guide

The Freelite Dot Plot Add-in

Add-ins are programs that add optional commands and features to Microsoft Excel. Before you can use an add-in, you must install it on your computer and then load it in Microsoft Excel. Add-ins (*.xla files) are installed by default in the Library folder in the Microsoft Excel folder. However, you may save the add-in anywhere that is accessible to your PC. Loading an add-in makes the feature available in Microsoft Excel and adds any associated commands to the appropriate menus.

To conserve memory, unload add-ins you do not use often. Unloading an add-in removes its features and commands from Microsoft Excel, but the add-in program remains on your computer so you can easily load it again.

Step One

1. Download the Add-in from the Distributor Portal and save to an accessible location on your computer.

Step Two - Load an installed add-in program in Microsoft Excel

1. Open Excel, select the Tools menu from the top toolbar and click Add-Ins.

Click Browse, and then locate the add-in file you downloaded from the portal.

2. In the Add-Ins available box, select the check box next to the add-in you want to load.

Unload an add-in program from Microsoft Excel

1. Open Excel, select the Tools menu from the top toolbar and click Add-Ins.
2. In the Add-Ins available box, clear the check box next to the add-in you want to unload.

Note: When you unload an add-in from Microsoft Excel, it is not removed from your computer system.

Using the Freelite Dot Plot Add-in

Having downloaded, installed and loaded the Dot Plot Add-in, you are ready to use Excel to report Freelite results.

1. Open Excel and click on the tab titled 'The Binding Site' in the top toolbar. From the drop down menu, select 'Kappa/Lambda' Plot.
2. Enter the requested data in the boxes provided and click 'OK'

Your results will then be displayed in the Freelite Dot Plot. On the next two pages is an explanation of how to interpret the positioning of patient results on the dot plot.

Freelite Dot Plot - Interpreting Results

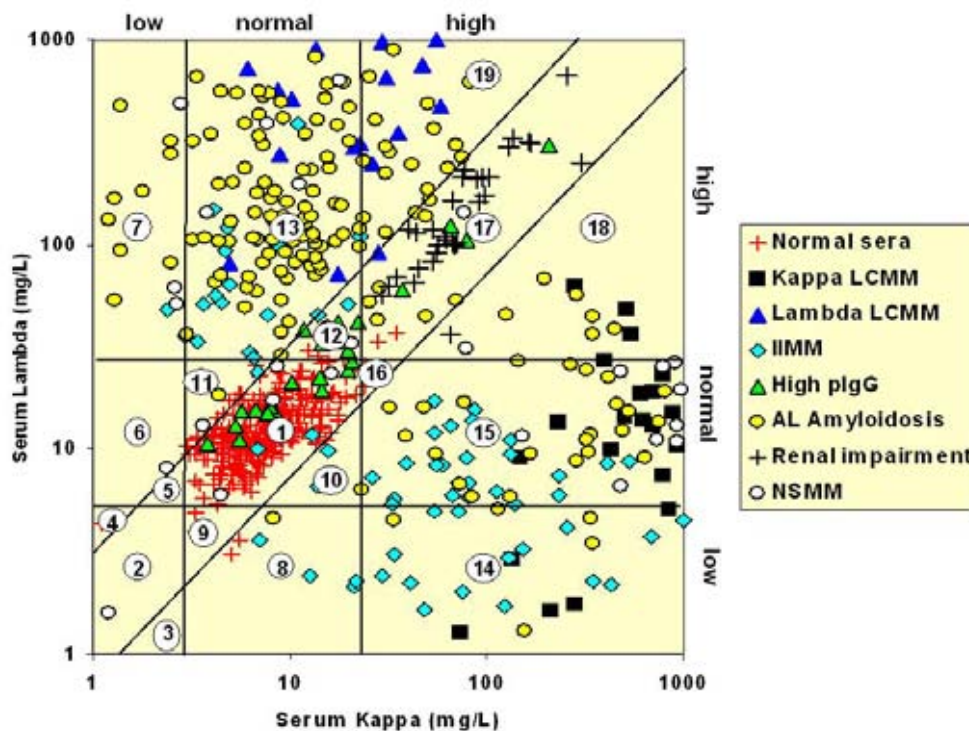


Figure 1. Serum kappa and lambda concentrations in a selection of clinical conditions. Patients are categorised according to serum free light chain concentrations and κ/λ ratios (see Table 1). The axes are truncated for clarity.

Sample results should be considered under the following categories and investigated appropriately.

a. Normal samples. The normal range for serum free light chains is described in chapter 5 of the book “Serum Free Light chain assays” by A R Bradwell. If electrophoresis tests for monoclonal proteins are also normal it is most unlikely that the patient has a monoclonal gammopathy.

b. Abnormal κ/λ ratios indicate a monoclonal gammopathy and should be investigated.

c. Low concentrations of one or both light chains indicate a degree of bone marrow suppression, either from bone marrow replacement by the tumour or from tumour therapy.

d. High concentrations of both light chains or the non-tumour light chain in patients with monoclonal gammopathies can be due to the following:-

- renal impairment
- over production of polyclonal light chains and probably intact immunoglobulins
- biclonal gammopathy of different light chain types.

Renal function tests and serum electrophoresis should be used to assess these different possibilities.

	Kappa	Lambda	κ/λ	Interpretation
1	Normal	Normal	Normal	Normal serum
2	Low	Low	Normal	BM suppression without MG
3			High	MG with BM suppression
4			Low	
5		Normal	Normal	Normal serum/BM suppression
6			Low	MG with BM suppression
7		High	Low	
8		Normal	Low	High
9	Normal			Normal serum/BM suppression
10	Normal		High	MG with BM suppression
11			Low	
12	High		Normal	plg or renal impairment
13			Low	MG without BM suppression
14	High	Low	High	MG with BM suppression
15		Normal		MG without BM suppression
16		High	Normal	plg or renal impairment
17				MG with renal impairment
18			High	
19			Low	

Table 1. Classification of monoclonal gammopathies according to serum kappa and lambda concentrations. BM – bone marrow; MG = monoclonal gammopathy; plg = polyclonal hypergammaglobulinaemia.