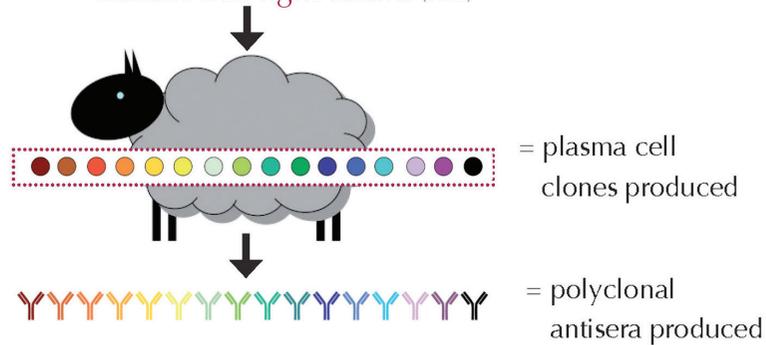


Polyclonal **Freelite**[®] assay - the **Gold Standard** for accurate quantification of free light chains

Polyclonal Antibody Production

Sheep are immunised with a large pool of human free light chains (FLC)

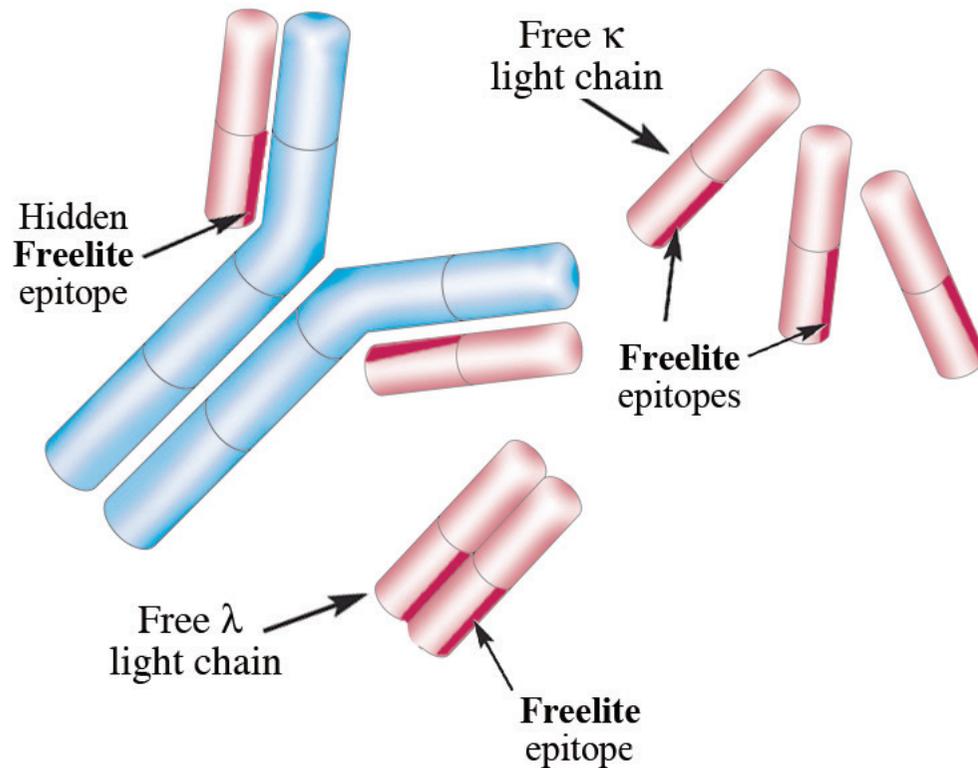


Multiple colours represent the variety of plasma cell clones and antisera produced.

**Polyclonal
FLC antibody assays
vs
Monoclonal FLC antibody
assays**



Freelite: a quantitative polyclonal assay



Freelite is a sensitive, specific marker of free light chains (FLC) in serum and provides quantitative measurement of:

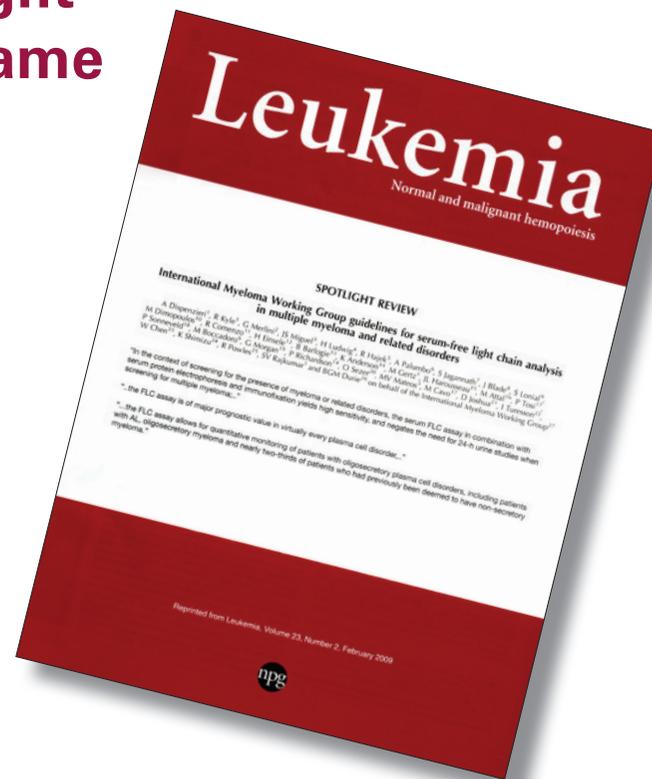
- κ FLC in serum
- λ FLC in serum
- the serum κ/λ FLC ratio

The serum κ/λ FLC ratio is a strong indicator of monoclonality and is essential for accurate quantification of serum free light chains.

Freelite is recommended by name in International Guidelines

Freelite is the only serum free light chain assay recommended by name in International Guidelines¹

International Myeloma Working Group (IMWG) guidelines recommend the polyclonal Freelite assay for screening, diagnosis and monitoring of plasma cell disorders.



Find out
more



Download the
Guidelines here

Recommended by Guidelines

Why use a Polyclonal Antibody based FLC assay?

Only polyclonal antibodies can bind to an extensive range of different protein epitopes

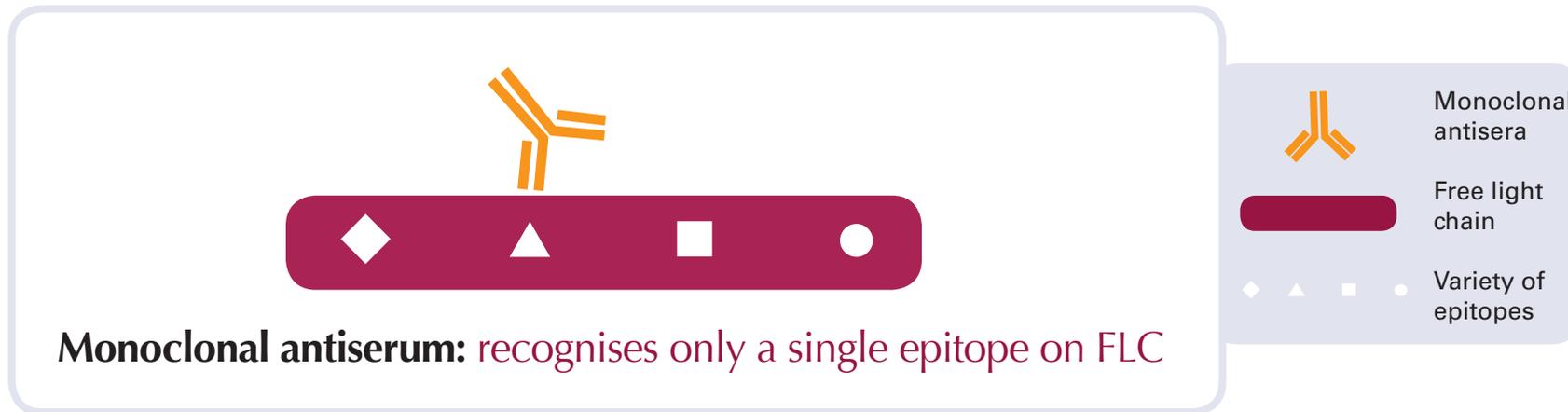


- Immunoglobulins and free light chains (FLC) are highly variable. All total Immunoglobulin assays use polyclonal antisera.
- To recognise these variations of κ and λ serum FLC, a polyclonal assay such as **Freelite** is needed.
- **Freelite** uses sheep polyclonal antisera raised against a wide variety of different monoclonal serum FLC whereas monoclonal based assays may use only one or two.

Freelite is Polyclonal

Why should you NOT use a Monoclonal Antibody based FLC assay?

Monoclonal antiserum recognises only a single epitope on free light chains (FLC)



- A monoclonal antibody is made from a single plasma cell clone and is targeted against a single antigen epitope.
- Monoclonal antisera may not detect the pathological monoclonal FLC due to their highly variable nature.
- This may result in inaccurate quantification of FLC.

Freelite - The Gold Standard free light chain assay

For proven reliability and consistent analytical performance: use Freelite

Precision

Be confident in your **Freelite** results - excellent precision with coefficient of variation (CV) typically less than 8%.

Batch to Batch consistency

There is less than 5% variation between two consecutive batches of Binding Site antisera. We use large pools of antisera with over 200 immunisations per pool.

Reliability

You will detect the widest range of monoclonal FLC epitopes due to the polyclonal nature of **Freelite**.

Good batch to batch reproducibility and precision support the inclusion of the polyclonal Freelite test into International Guidelines¹

For up to date information on **Freelite** access our free, educational App here

Wikilite
App



Differences in clinical performance support the use of Polyclonal assays

17 studies to date with
>700 Light Chain Multiple Myeloma (LCMM) patients
show monoclonal FLC have been
detected by Freelite in every case ²⁻¹⁷

5 studies to date:
Monoclonal FLC assay has missed 7
confirmed LCMM patients ¹³⁻¹⁷

See further evidence on
the differences between
Polyclonal & Monoclonal
FLC assays - download
Lock *et al.* 2013:

Find out
more



International Guidelines based on the polyclonal Freelite assay
cannot be applied to the monoclonal FLC assay for measurable
disease in Multiple Myeloma and AL amyloidosis¹⁵

Why use the Polyclonal Freelite test?

- **Freelite** is the only proven way to detect the widest variety of monoclonal serum free light chains
- Over 1500 publications support the utility of the polyclonal **Freelite** assay
- Be confident you are following International Guidelines

This paper provides consensus guidelines for the use of this important assay, in the diagnosis and management of clonal PCD.¹

International Myeloma Working Group guidelines. 2009

Guidelines for the use of free light chain measurement (which have been based upon results from the Freelite™ assays) cannot be considered to apply to the N Latex FLC assays.¹⁸

Drayson MT & Carr-Smith HD. 2012

...some clones might be missed by the more limited epitope specificity expected of monoclonal antisera.¹⁵

Lock *et al.* 2013

PCD: Plasma Cell Disorders

Freelite - Ask for it by Name

Learn more about Polyclonal free light chain assays

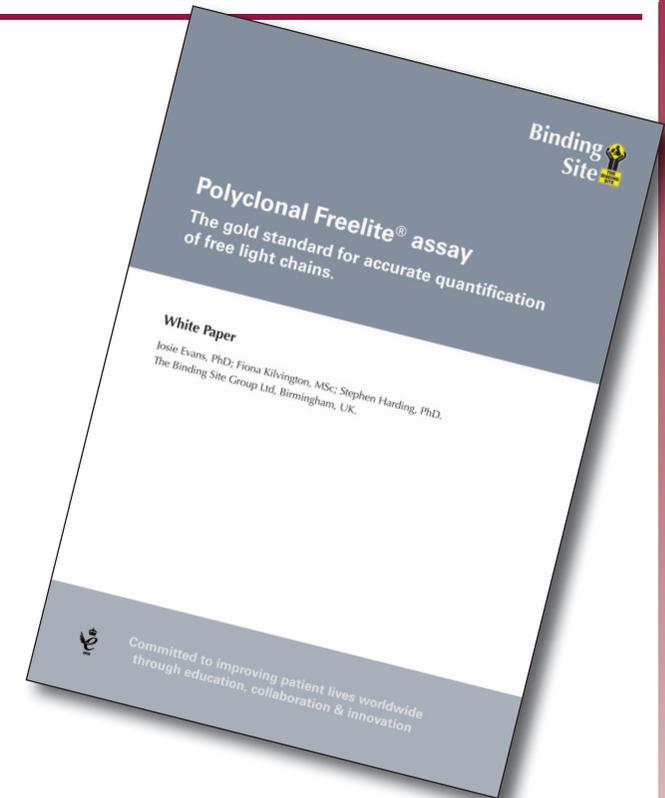
Polyclonal Freelite White Paper

by Dr Stephen Harding, Dr Josie Evans and Fiona Kilvington

The White Paper compares the performance of Freelite® and the Siemens N Latex FLC assays.

It answers a number of questions:

- Can monoclonal assays recognise the same wide variety of serum free light chains (FLC) found in Multiple Myeloma patients that polyclonal assays do?
- Are monoclonal assays as effective for detecting FLC in LCMM patients as **Freelite**?
- Are the absolute values of kappa and lambda FLC comparable?
- Which assay will let me follow international guidelines to help diagnose and monitor Multiple Myeloma?
- How do the assays compare in terms of antigen excess, precision, linearity and batch to batch consistency?



Order your free copy
of the Polyclonal
White Paper



Learn more about Polyclonal free light chain assays

For up to date information on **Freelite** download our free, educational App here

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Download on the
App Store

View the Polyclonal vs. Monoclonal webinar, presented by Binding Site's Technical Director, Dr. Hugh Carr-Smith.



Share this eBook:



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