

Mabtech IRIS[™] enables unbiased FluoroSpot analysis

Plug-and-play functionality minimizes user-bias Five operators were instructed to read the same plate on the Mabtech IRIS[™] and a competitor reader.



Accurate spot center detection is key

The RAWspot[™] technology and default settings utilized by Mabtech IRIS[™] accurately detects each spot center and gives precise spot counts.

Mabtech IRIS[™]

RAWspot[™] technology 838 spots detected.





Competitor instrument

Competitor spot counting algorithm 436 spots detected

Purpose

Our aim of the present study was to compare Mabtech IRIS[™] with another commercial FluoroSpot reader requiring user-defined settings, to evaluate whether user-defined input and experience in FluoroSpot analysis influences spot counts.

Method

The Mabtech IRIS[™] FluoroSpot reader has fixed camera settings and RAWspot[™] technology, whereas other commercial readers require user-defined settings of the camera, algorithm and XY-table. To assess the effect of user-defined input on analysis, an external organization was contracted and five operators of varying experience levels were given a FluoroSpot plate with wells in four replicates of an unknown sample. The operators were instructed to analyse the plate using two different readers: (i) Mabtech IRIS[™] and (ii) a competitor FluoroSpot reader.

Results

Five operators counted an unknown sample in four replicates. With Mabtech IRIS[™] the operators' average spot-forming units (SFU) ranged between 191-202 spots, resulting in a coefficient of variance (CV) of 3%. With the competitor reader, the operator range was between 24-160 spots (CV 59%). A summary of the results is shown in the graph to the left.

Conclusion

Mabtech $IRIS^{TM}$ minimizes the user-defined subjective input of the analysis, thereby reducing the influence of the operator on the end result.