

## Sensitive quantification of antibodies using the ConSense® analyzer

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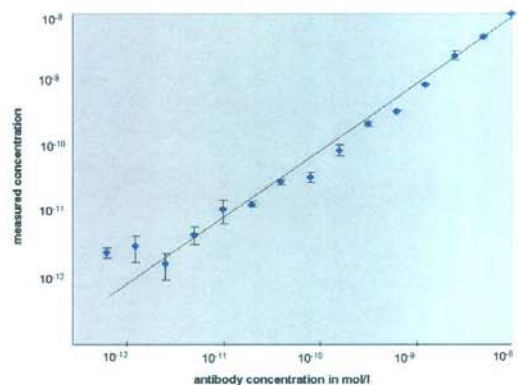
flUIT Biosystems has developed a new approach called accurate stochastic fluorescence spectroscopy (ASFS) to detect fluorescence-labeled molecules in very low concentrations in homogenous assay formats. Using the confocal ConSense® Analyzer concentrations in the picomolar range can be reliably determined.

The ASFS method is able to distinguish and quantify freely diffusing fluorescent molecules in solution. It makes use of the fact that the individual molecular properties (e.g. size, diffusion, velocity, quenching and brightness) are reflected in different sets of molecule specific parameters referred to as "fluorescence footprints".

In this application note we demonstrate the potential of ASFS for the detection of low concentrations of antibodies for therapeutic and diagnostic research applications.

The graph shows the results of a dilution series of an Alexa532-labeled goat antibody (supplied by Invitrogen) in PBS standard buffer covering four orders of magnitude. The error bars indicate the standard deviation of three

different series performed at different days.



Measurements were conducted in flUIT Biosystems' 11-channel standard glass detection chips.

### Measurement parameters

- sample volume: 8µl
- measuring time: 1 minute
- excitation power: 50 µW
- bintime: 50µs

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