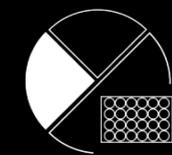


White FOx is the only SPR system that can reliably measure in crude samples, including whole blood.

- The performance and speed of SPR
- The ease of use of a dip-in sensor
- Process crude samples, no clogging, no cleaning

**Labelled**



Fast sandwich assays

**Label-free**



Label-free quantification of protein and antibodies



Kinetics

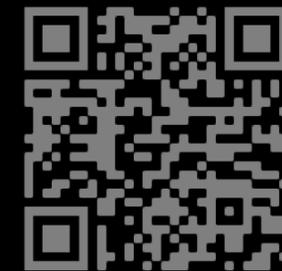
**Breaking limits**



Crude matrices or blood

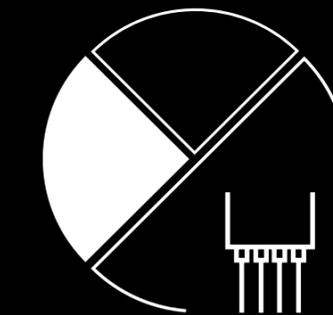


Large particles and vesicles



# The White FOx

## Breaking the limits in bioanalysis



Label-free kinetic affinity data, whole blood analysis, sandwich assays all from one flexible benchtop instrument!

'Our expertise now allows us to efficiently transfer an ELISA to the White FOx. An optimised FOx assay saves us time when running the assay.'

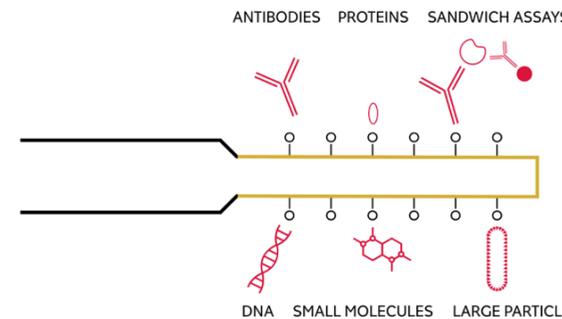
Karen Vanhoorelbeke,  
Pharmabs, KULEUVEN

# Probes

The FO-SPR probes can be coupled with a range of biomolecules for label-free detection, affinity ranking and kinetic analysis. Fast gold nanoparticle sandwich assays provide sensitive quantification. All probes are compatible with regeneration protocols.

<b>Carboxyl</b>	Generic surface chemistry for full control
<b>NTA</b>	Ideal for analysing His-tag proteins
<b>Streptavidin</b>	Simply functionalize with your biotinylated molecules
<b>Protein A</b>	Direct IgG quantification and potency screening, easy regeneration

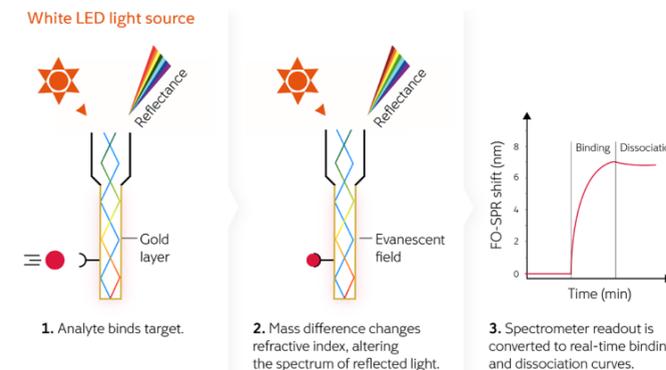
Visit [foxbiosystems.com](http://foxbiosystems.com) to see what researchers have published using FO-SPR probes.



# Instrument

## Features of the White FOx:

- True surface plasmon resonance
- Fluidics free reading in microtiter plates
- Directly from crude samples: proteins, antibodies, nanobodies, complex particles, EVs, viruses, phage display, etc.
- Unprecedented robustness and low maintenance, no instrument calibration needed
- Fast time-to-result
- Reduced hands-on time
- Cost-effective compared to competing biosensor technologies



Fiber-optic surface plasmon resonance



# Easy

## Even for challenging samples

The fiber-optic probe setup allows a fluidics-free dip-in protocol for the analysis of specific biomolecule binding directly in complex samples such as lysates, whole blood or large particles.

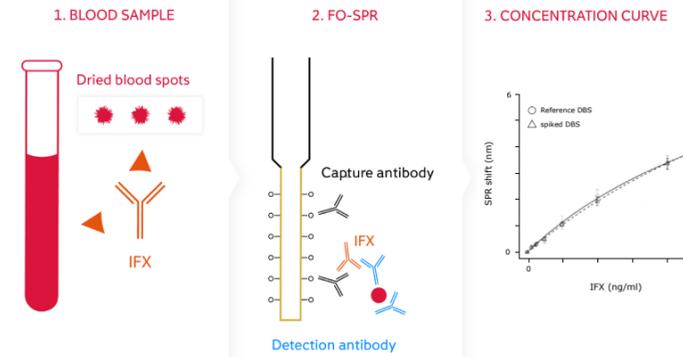
- **Minimal sample processing.**
- **No clogging, no cleaning.**

## FO-SPR can accurately detect antibodies in dried blood spots.

The therapeutic drug antibody, infliximab (IFX), was spiked into blood and dried. The IFX concentration from the extract using FO-SPR correlated well with results using ELISA.

## Application areas

- General protein characterization
- Immunoassay development
- Diagnostic development
- Screening and R&D for biologicals
- Bioprocess control

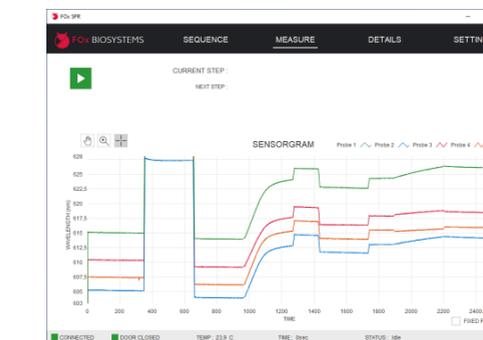


Lu et al. (2017) Immunoassay for detection of infliximab in whole blood using a fiber-optic surface plasmon resonance biosensor. *Anal. Chem.* 89, 3664–3671

# Software

Software is an important part of the FO-SPR package.

- Easy to create and change protocols without programming skills using the intuitive, visual interface.
- Follow sensorgrams in real time or leave the run unattended and view the data later.
- Open data format compatible with standard data-handling software.
- Data processing tool makes it easy to select and group curve sequences of interest and export data.
- Data analysis suite for detailed kinetics and calibration curves.



# Specifications

<b>Model</b>	White FOx 1	<b>Mixing frequency</b>	Max. 2000 rpm
<b>PC interface</b>	USB 2.0 high-speed	<b>Mains supply</b>	100-240 V (±10%) / 50-60 Hz, IEC connector
<b>Software &amp; operating system</b>	User-friendly, Windows 10, 64 bit compatible	<b>Max. power</b>	300 VA
<b>Concentration range</b>	µM - nM (label free); pM - fM (sandwich assays)	<b>Fuses</b>	1x T4AL250V
<b>Assay volume</b>	140 µl/well; non-destructive testing	<b>Size</b>	45 cm(W) x 43 cm(L) x 42 cm(H)
<b># of probes in parallel</b>	4	<b>Weight</b>	24 kg
<b>Capacity</b>	96 well plate; 96 probes	<b>Electrical safety</b>	IEC protection class 1
<b>Temperature control</b>	Ambient to 42°C	<b>Conformity</b>	CE

