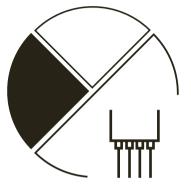


# WHITE FOx

Breaking the limits in bioanalysis





Measure real-time kinetics directly in complex samples with easy to use dip-in reading. 'Our expertise now allows us to efficiently transfer an ELISA to the WHITE FOx. An optimized FOx assay saves us time when running the assay.'

> Karen Vanhoorelbeke, Pharmabs, KULEUVEN



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



Labeled





Label-free quantification of protein and antibodies



**Kinetics** 



### **Breaking limits**



Large particles

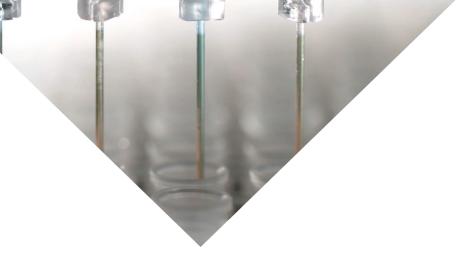
and vesicles

Crude matrices or blood

Label-free

lood





### Probes

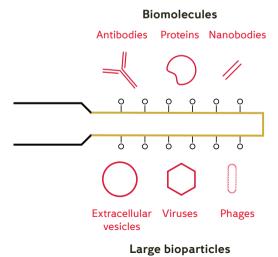
#### Interchangeable dip-in FO-SPR probes:

- Multiple surface chemistries available
- Low non-specific binding
- Can be regenerated and reused

Suitable for label-free detection, affinity ranking, kinetic analysis and fast sandwich assays.

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

Visit <u>foxbiosystems.com</u> to see what researchers have published using FO-SPR probes.

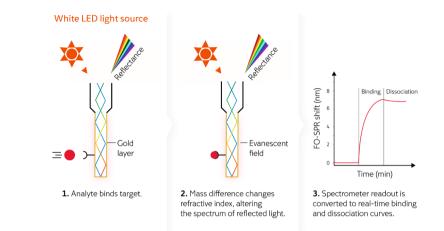




## Instrument

### Benefits of WHITE FOx:

- Fiber-optic surface plasmon resonance
- Label-free and labeled applications
- Binding kinetics and quantification
- No fluidics: no clogging, low maintenance
- Measure directly in simple or complex matrices
- Measure large particles
- Unprecedented robustness and low maintenance
- Fast time-to-result
- Reduced hands-on time



### Fiber-optic surface plasmon resonance







## Easy

### Even for challenging samples

#### No fluidics, no clogging.

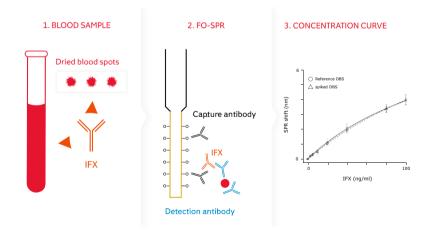
- Analyze complex matrices without sample prep
- Analyze large biomolecules, complexes and large structures like phage, viruses or vesicles
- Avoid time-consuming maintenance and cleaning

#### Application areas:

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

#### 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.



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**

۵.		SEQUENCE	MEASURE	DETAILS	SETTINGS
	Sequence Invalid	Current Step: Next Step:			
	2 Q +		Sensorgram	Probe 1 $\wedge$ Probe 2	→ Probe 3  → Probe 4  →
a a b a b a b a b a b a b a b a b a b a					
			2300 ine	NOO	nae sos ese
6 - 36 - 3	00 300 Tane (Red	anda) the	430 250		

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





Contact us info@foxbiosystems.com

Or visit www.foxbiosystems.com