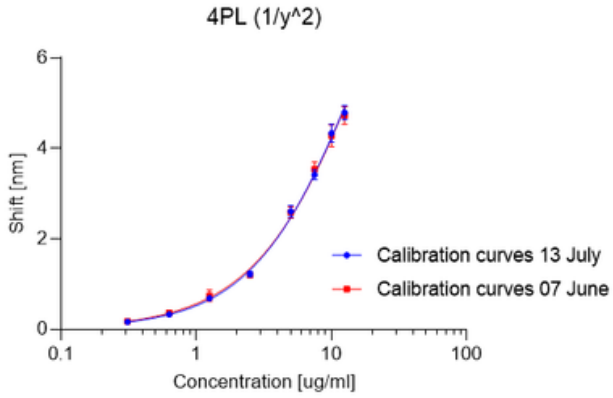
Are you looking for a way to streamline your biotherapeutics production process?

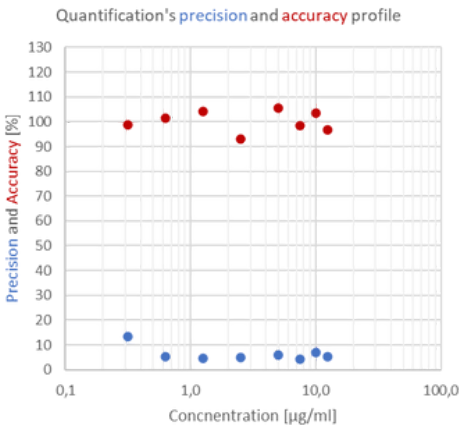
APPNOTE

Efficient drug discovery & development using a label-free assay

When monitoring bioreactor processes, analytical methods must be fast, cost-efficient and reliable, so relevant results are available quickly and with minimal risk of sample preparation errors. This enables timely, meaningful adjustments to upstream and downstream processes.
Vixen Bio's uses the WHITE FOx label-free analysis platform because it measures through a single, specific affinity interaction – without relying on multiple interaction partners or washed equilibrium steps, with low to no non-specific binding. This means we can work directly with crude samples, including cell lysates, which is invaluable for supporting process development and optimization for bioproduction.

WHITE FOx's dip-in sensors allow us to monitor biologically relevant concentrations of monoclonal IgG – in this example case trastuzumab (Herceptin) produced from stably transfected CHO cells in a continuous perfusion bioreactor – providing our clients with reliable, actionable data for process control and quality assessment.





Highlights

- **Quantification range** from 0.31 to 12.5µg/ml, covering diluted samples from 5.8 to 139 µg/ml initial concentration.
- **Short time to result** in <11 min. from sampling
- **Low non-specific** binding between cell culture media and capture antibodies
- **High repeatability**: inter-assay coefficient of variation <10%
- **Accuracy**: 90 - 110%

Conclusion

The WHITE FOx technology can accurately detect and quantify proteins in bioreactor samples with minimal processing. With repeatable results in as little as six minutes, simple handling and direct detection, it can be used to optimize bioreactor processes reliably.

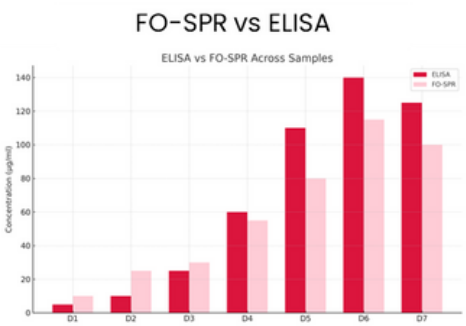
Vixen Bio can get you access to this superior technology via services, rental or purchase.

VIXEN BIO



Vixen Bio provides accurate and precise quantitation and kinetic studies of biomolecular interactions with its proprietary device “WHITE FOx”. Our convenient dip-in probe and deep expertise in immunoassays enables us to analyze in complex -clinical- samples, during any stage of (drug-) development.

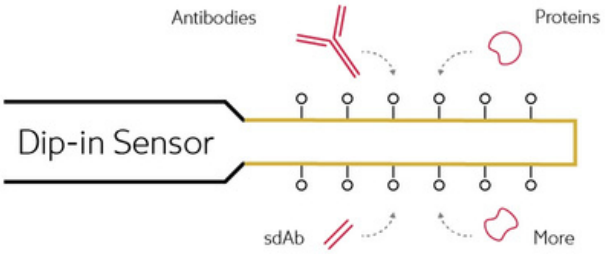
- **Excellent correlation** with optimized ELISA (Pearson correlation 0.992 with 50x diluted samples)
- **Excellent ranking correlation** in between 20 - 500µg/ml original sample with Spearman coefficient of 0.988



Comparison of concentrations obtained from FO-SPR assay against the anti-IgG ELISA test. Pearson correlation coefficient 0.992.

The advantages of WHITE FOx by Vixen Bio:

- **Label-free direct single interactions** (epitope, Fc, anti-hIgG, proA/G,...)
- **High accuracy and precision**
- **Fast: sample to result in as little as 10 minutes**
- **No fluidics -** No cleaning
  - Minimal sample processing
  - No cross-contamination



Services by Vixen Bio:

- **Real-time kinetics & concentration from any target in any sample**
- **Fast, Sensitive & To industry standards:** highly comparable results with ELISA & other real-time technologies.
- **Flexible:**
  - Samples measured **@ Vixen Bio labs**
  - WHITE FOX **@ your lab**
  - **Fully developed** assays for a variety of biologicals.



READ MORE ON VIXENBIO.COM
LET’S TALK INFO@VIXENBIO.COM

Twitter | LinkedIn
Bollebergen 2B | 9250 Zwijnaarde | Belgium

VIXEN BIO