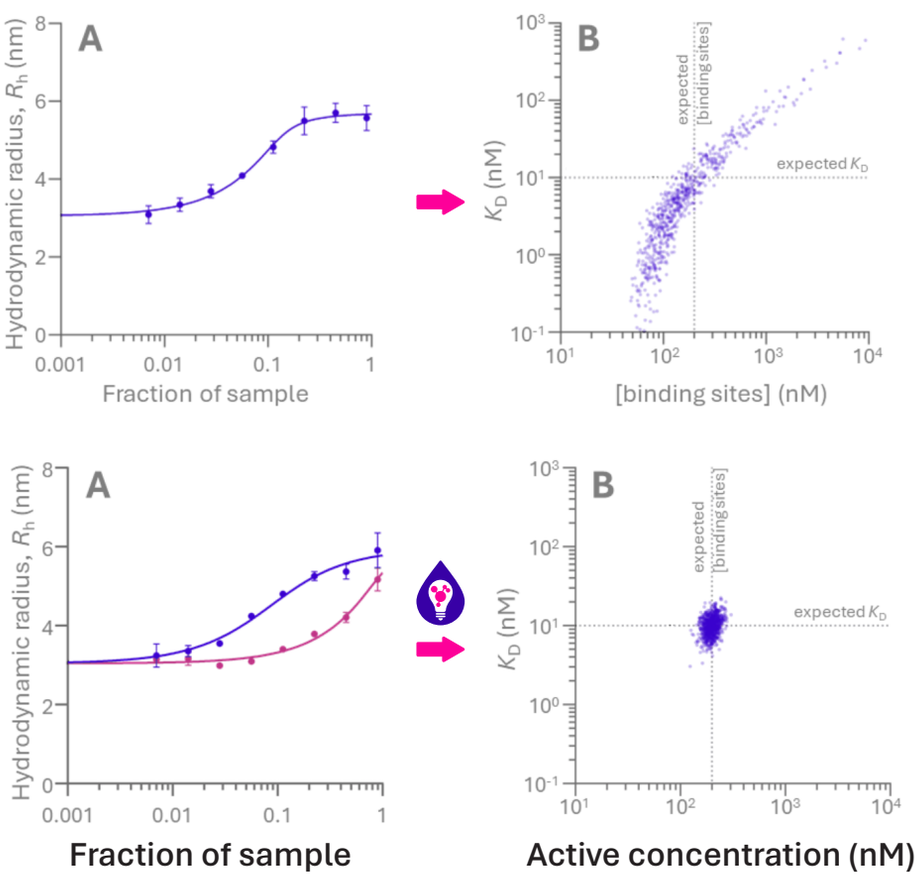
Fluidity Insight

Easily determine active concentration

Fluidity Insight is an advanced analytical platform that allows you to establish the active concentration of your critical species, without the need for calibrants or reference standards.



De novo concentration determination

The powerful fitting engine of Fluidity Insight harnesses Bayesian statistics and global fitting to reveal both binding affinity and active concentration directly from integrated binding data.

Fluidity Insight workflow

STEP 1

Run standard conditions for initial dataset, irrespective of sample.

STEP 2

Analyze initial data using Fluidity Insight. If convergence is satisfactory, experiment is complete. Make a cup of tea.

STEP 3

If fit is not yet sufficiently converged, refer to Bayesian Experimental Design (BED) plot for guidance of additional datapoint(s) to run.

STEP 4

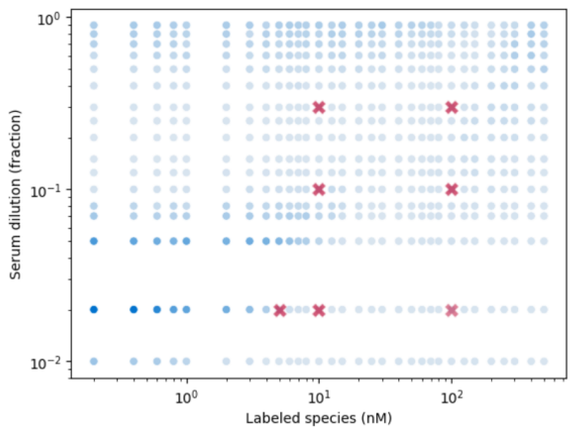
Run recommended datapoints and add data to existing dataset.

STEP 5

Analyze expanded data using Fluidity Insight. Repeat cycle if needed.

Eliminate the guesswork for experiment design and data analysis

Bayesian experimental design plot



Fluidity Insight can also guide you through your experiment, letting you know which datapoints you can add to your existing dataset to best improve the fit quality of your experiment.

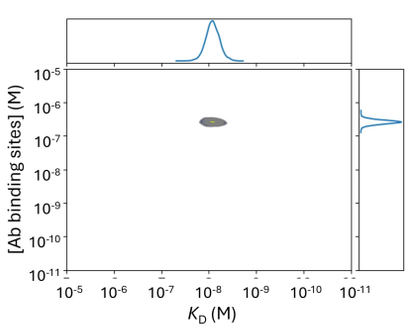
Easy AI/ML driven experiment design

- Leverage Bayesian inference to predict which concentration combinations to measure to most rapidly improve fit convergence.
- Ensure that the minimum of data is collected to get publication-quality results.

Get to the destination faster with templates for different assays

The SeroAffinity and Concentration (SAffCon) assay

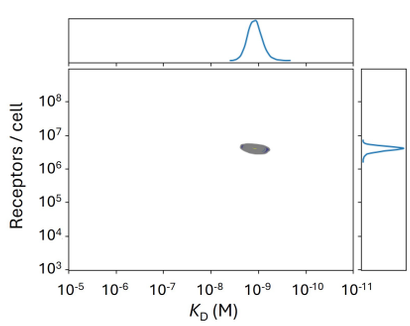
Determine affinity and calibration-free concentration of a target, even in complex matrices. Ideal for characterization of antibodies directly in serum.



K_D = 8 nM
[target] = 260 nM

The Membrane Affinity and Concentration (MAffCon) assay

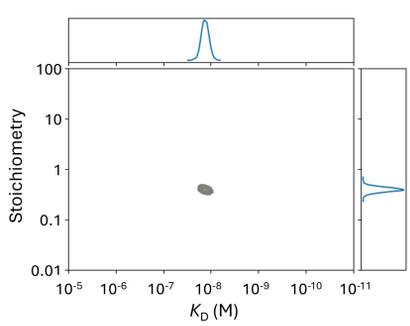
Determine the affinity of an interaction to a receptor or other membrane proteins, and the copy number of that protein in the source cell membrane. Works for crude membrane protein libraries.



K_D = 1 nM
[receptor] = 4×10^6 /cell

The Neuroaffinity and Stoichiometry (NeSt) assay

Determine the affinity and interaction stoichiometry of an interaction. Ideal for characterizing neurodegeneration-associated amyloid fibrils or any system for which binding stoichiometry is of interest.



K_D = 12.3 nM
Stoichiometry = 0.38

Extract the full picture from your binding data

- Combine data from different days, different users, and even different sites to create and analyze comprehensive datasets.
- Simply select your assay, choose the data to include from the self-organizing list and the machine learning-powered platform will take care of the rest.
- Automate outlier identification.

Fluidic Sciences

Have a question about Fluidity Insight?

CONTACT US