



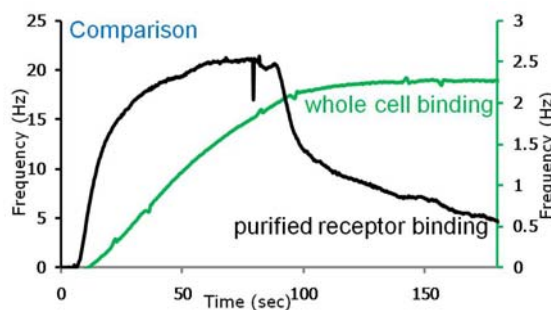
Discover the Attana Cell 200: label-free cell based biosensor for efficient drug candidate selection performing both biochemical and cell based assays!

The Attana Cell 200 has the unique ability to disclose the full binding profile, providing biologically relevant determination of kinetic rate constants, affinity and off-target interactions directly on cell surface, thus bridging the gap between traditional biochemical biosensors and cell based assays.

Why bridge the existing gap between biochemical and cell based assays?

One efficient tool in the selection process is biochemical label-free kinetic characterisation of interactions between candidate and target molecules. Information on association and dissociation rates and affinity is provided under purified conditions. However, the results obtained are often different compared to the affinity results obtained with cell based methods (fig1).

Hence, there is an uncertainty in the data used in the selection process.



The reason for the discrepancy is due to several factors, one being the difference in assay conditions. A biochemical assay is performed under artificial purified conditions whereas a cell based assay is performed under biological relevant conditions but usually with labelled molecules limited to end point and equilibrium data. The difference in kinetic

performance between biochemical and cell based assays is clearly seen in fig 1, explaining the difference in affinity. The main reason being that the association and dissociation rate are affected by clustering and accessibility hindrance of the targets on the cells, in contrast to the artificial perfect conditions in the biochemical assays.

Off-target interactions, interaction with other targets or the cell membrane in its self can be as important as the kinetic and affinity data and can severely affect the distribution of the candidates.

Bridging the gap between biochemical and cell based assays enables an early and efficient selection process in developing new therapeutics and diagnostics.

The Attana Cell 200 has the unique ability to disclose the full binding profile under biologically relevant conditions thereby bridging the gap between traditional biochemical biosensors and cell based assays.

