A leading light for drug discovery

Euroscreen S.A. has chosen Tecan's flexible Infinite® F200 PRO multimode plate reader for a variety of screening applications in drug discovery and characterization.

Euroscreen is a pre-clinical drug discovery company based in Gosselies, Belgium, focusing on development of small molecule drugs for unmet clinical needs. Specializing in G-protein coupled receptors (GPCRs), Euroscreen works with a number of major pharmaceutical manufacturers to develop and optimize first-in-class candidate compounds targeting GPCRs. In addition to its research activities, Euroscreen also operates a high throughput screening (HTS) service (Euroscreen FAST) providing customized GPCR screening and services for biotechnology companies and pharmaceutical manufacturers worldwide.

Euroscreen FAST carries out a variety of drug development studies on behalf of its customers – including lead optimization, candidate profiling, target characterization and ligand identification - using its extensive in-house library of GPCR assays, as well as the Tango[™] GPCR assay system from Life Technologies. To ensure high quality results across its broad range of assays, Euroscreen needed a multimode microplate reader offering optimal performance in both fluorescence and luminescence modes, as research scientist Laurent Meeus explained: "We develop and run numerous assays in support of our clients' drug development activities, requiring a reader with a great deal of flexibility to accommodate the varying needs of each project. In addition, we recently signed a licensing agreement with Life Technologies to use its Tango GPCR assay system, and so wanted a reader offering optimal performance for these

assays. We assessed multimode readers from various manufacturers, and Tecan's Infinite F200 PRO represented the best combination of performance and value, as well as benefiting from Tecan's high quality technical support."

Jerôme Bernard, managing director for services activities at Euroscreen, added: "By using the Infinite F200 PRO in conjunction with our existing Tecan liquid handling workstation, we are now able to offer high throughput screening for small molecule GPCR ligands, using fluorescent or luminescent reporter systems. The platform is able to automatically cherry-pick positive results for verification and, once hits have been confirmed, it then prepares serial dilutions of these compounds to establish dose response curves."

"As well as small molecule screening, we perform a large number of deorphanization studies, identifying biological ligands for so-called 'orphan' GPCRs. This is currently an important area of drug discovery, identifying novel druggable targets for numerous diseases. We have a large collection of human and animal tissue extracts, and both the Tecan workstation and reader are vital to this work, allowing us to screen large libraries of natural ligands for possible agonists or antagonists to a target GPCR."

"The main advantage of this automated set-up is the amount of time it saves per assay," Laurent continued. "Our liquid handling workstation is equipped with



Dr Laurent Meeus with the Infinite F200 multimode reader

a Carousel[™], allowing a large number of plates to be loaded onto the system for high throughput processing without the need for constant manual intervention. The system is very easy to use, and automation of both liquid handling and screening ensures excellent reproducibility."

"Although this platform is predominantly used for GPCR work, the flexible nature of the Infinite reader allows us to take advantage of its high throughput capabilities for other assays should the need arise, and our instrument is also configured for both Fluo-4 and HTRF® assays. This provides a back-up for other readers in the laboratory, offering additional capacity and ensuring we are able to meet our commitment to clients. The support we receive from Tecan is also very important in this respect. We have a good relationship with Tecan's application specialists and engineers, and they have always been quick to respond to our needs. Although the Infinite F200 PRO is a relatively new instrument, we have been very happy with its performance. It combines ease of use with fast measurements and good reproducibility, perfectly fulfilling our needs."

To find out more on Tecan's Infinite 200 PRO, visit **www.tecan.com/infinite200**

To learn more about Euroscreen, go to **www.euroscreen.com**

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