Fragment library screening by Grating Coupling Interferometry (GCI) and benefits over Surface Plasmon Resonance (SPR)

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Domainex has expanded its biophysics platform to incorporate the new Creoptix WAVE Delta system that uses Grating Coupled Interferometry (GCI). GCI is analogous to Surface Plasmon Resonance (SPR) systems where the target protein is immobilised on to specialised sensor chips, however, the laser light travels over the entire length of the chip rather than a single point and the novel fluidics enables measurements of very **fast off-rates** up to 10 s⁻¹. This increases the **sensitivity** as more binding events contribute to the overall signal, which is ideal to identify weakly bound fragment hits. The newly launched waveRAPID technology increases system throughput and compound handling time allowing full kinetic characterisation with **unattended loading capability** for up to **400 compounds in 24 hours**.

The poster will detail examples of fragment library screening successes.



Figure 1. Indicates the difference and benefit of GCI over SPR



Figure 2. Highlights the advantages of RAPID kinetics