MultiDish 2x2

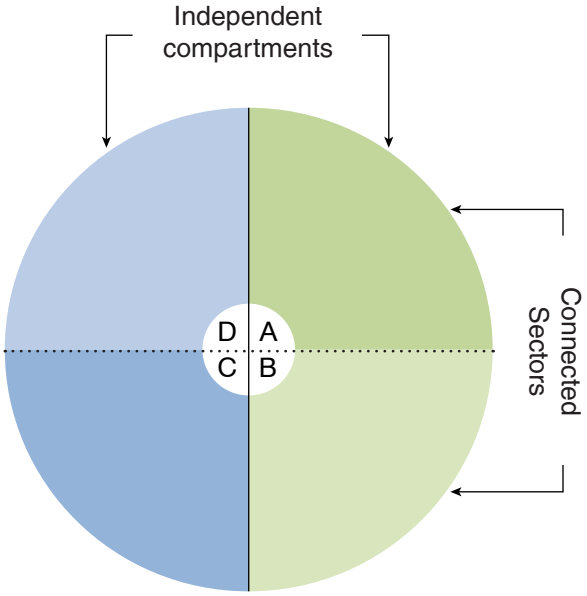
Higher throughput, easier comparison

LigandTracer® MultiDish 2×2 contains two independent compartments that doubles the throughput of LigandTracer while simultaneously facilitating comparative interaction studies.

MultiDish 2×2 Technology

LigandTracer MultiDish 2×2 has two isolated compartments (A/B and C/D) separated by a high wall (solid line), with each compartment split into two sectors each. The sectors are divided by a lower wall (dotted line) that facilitates seeding of cells in a sector specific manner without interfering with the flow of the ligand solution during a LigandTracer measurement.

LigandTracer Control version 2.3 and newer contains pre-defined settings for the simultaneous measurement of both compartments of the MultiDish, which results in two independent reference-subtracted curves. Additionally, the learning module of LigandTracer Control now includes a lesson describing the functionality and applications of the MultiDish.



Compatibility

Note that LigandTracer MultiDish is only compatible with LigandTracer Green Second generation (serial numbers RCF-041XXX) or older LigandTracer Green instruments that have been upgraded.

For more information about our upgrade package, please contact: support@ridgeview.eu

Available models

For more information about the different models of LigandTracer MultiDish 2×2, please visit: www.ligandtracer.com

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www.ligandtracer.com

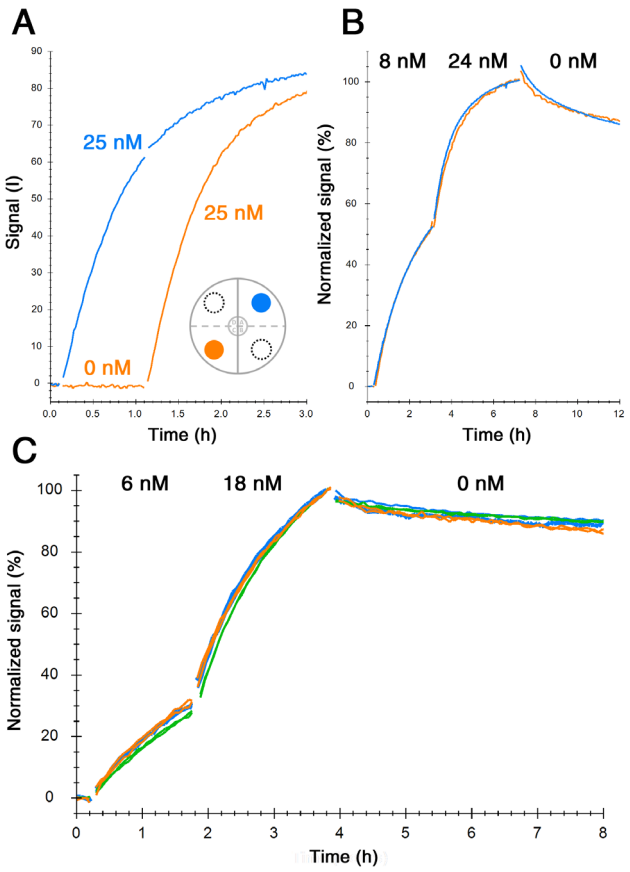
Application Example

Materials and methods

To validate the performance, real-time binding of FITC-labeled anti-human IgG to adsorbed human IgG was detected one hour apart in a LigandTracer *non-treated* MultiDish 2×2 to investigate whether the signal in one compartment could affect the signal in the other[1,2].

The interaction kinetics measured in LigandTracer MultiDish 2×2 were also compared with the interactions detected in commercially available alternatives[1]:

- FITC-labeled anti-human IgG binding to adsorbed human IgG in a *non-treated* MultiDish 2×2 or a Nunc™ non-treated dish (Cat. No. 263991)[2].
- FITC-labeled pertuzumab binding to SKOV3 cells in a *cell culture* MultiDish 2×2[3], a *polydopamine coated* MultiDish 2×2[4] or a Nunc™ cell culture dish[5] (Cat. No. 150350), duplicates of each.



Results

The curves of the different compartments of LigandTracer MultiDish 2×2 were not affected by each other (Fig. A).

No clear differences in interaction kinetics were observed between the tested models of LigandTracer MultiDish 2×2 (Fig. B, orange: *non-treated*, Fig. C, orange: *cell culture*, Fig. C, green: *polydopamine*) and their commercially available alternatives (Fig. B, C: blue).

Conclusion

LigandTracer MultiDish 2×2 doubles the throughput of your LigandTracer instrument and allows for a straightforward evaluation of protein-cell and protein-protein interactions. The compartments are completely independent and the interactions behave just as in regular cell culture or non-treated dishes.

References

1. Protocol: A typical LigandTracer measurement
2. Protocol: Adsorb protein to a polystyrene dish
3. Protocol: Seeding cells in LigandTracer *cell culture* MultiDish 2×2
4. Protocol: Seeding cells in LigandTracer *polydopamine coated* MultiDish 2×2
5. Protocol: Seeding cells for LigandTracer