

Your Models – Our Expertise

Customized Assay Solutions for
Translational Research



High-Fidelity Insights for Your Translational Cell Models

Unlock the full functional profile of your proprietary healthy or disease-specific cell models with real-time, label-free assays that capture contractile, electrical, and morphological performance.

We specialize in high-content assay development and testing for non-cardiac, contractile cell types such as smooth muscle and skeletal muscle cells, delivering rich, real-time functional data across multiple modalities.

For cardiac disease models, we provide advanced validation strategies to help translate early phenotypes into meaningful, reproducible endpoints. Custom disease models hold enormous promise – but only when rigorously validated.

Comprehensive Phenotypic Profiling

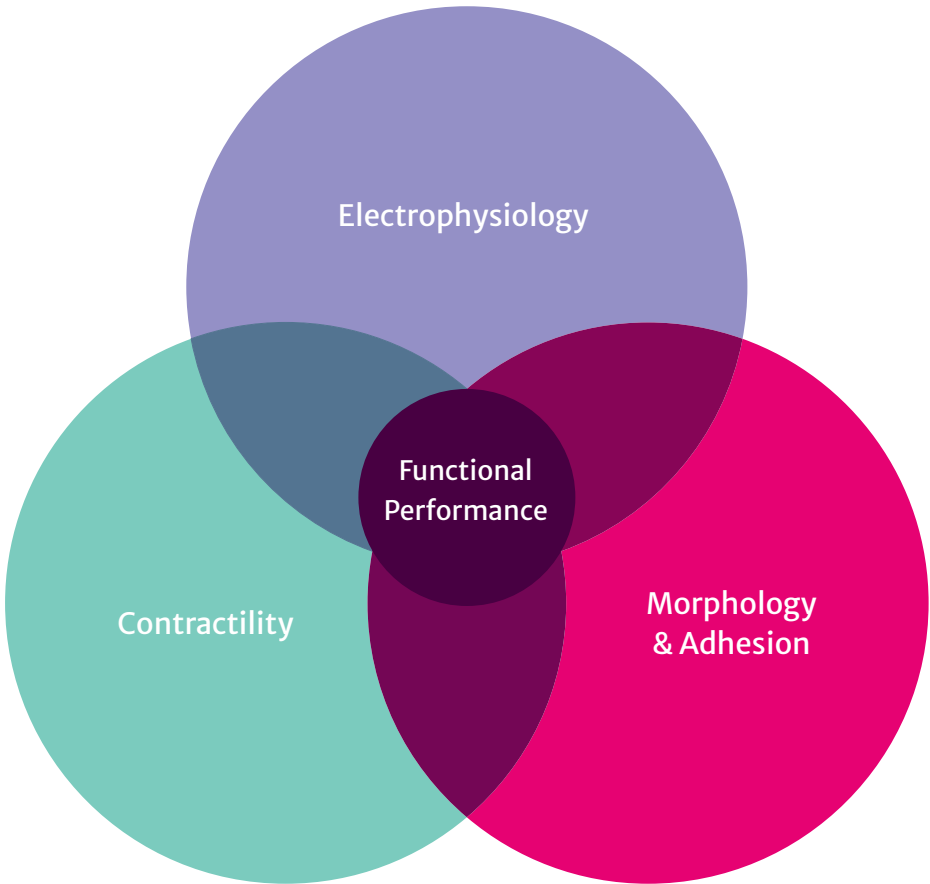
Access a comprehensive view of your cell model’s performance through complementary readouts that capture mechanical, ion channel, and structural behavior. Our assays deliver real-time insights into key phenotypic traits relevant for both healthy and disease-specific conditions.

- Contractility**

Track contraction dynamics in cardiac, smooth or skeletal muscle cells
- Electrophysiology**

Measure membrane potential shifts and ion channel activity
- Morphology & Adhesion**

Monitor shape changes, monolayer integrity, and cell-matrix interactions



Assay Development – Build Around Your Biology

Choose your tailored assay development approach to model disease-specific biology with precision. Whether based on your custom cell lines or commercial cell models, we co-develop functional assays that capture meaningful phenotypes.

Assay Development	Cell Line Characterization	Drug Response Validation
Fully customized assays – your cell type, disease context, and research objective	Designed to your needs – spontaneous vs. stimulated activity, acute vs. chronic drug exposure, multi-dose formats	Access precision validation – for meaningful results from first pilot to routine screening

Why Partner with Us for Cardiac Cell Line Validation

- Tailored Solutions**

Each assay is custom-built to match your specific cell model and research questions
- Rapid Execution**


Accelerated timelines with a focus on data clarity and reproducibility
- Expert Collaboration**

Work directly with our assay development scientists to streamline your project



Start Testing Smarter

Let’s bring your models to life through functional validation. Contact us to discuss your custom assay development or pilot study needs!



“Validating our disease model required more than just technical execution – it needed a partner who understood both the science and the strategic goals behind it. innoVitro provided exactly that. Their team worked closely with us to tailor the assay, capturing disease-relevant functional endpoints with impressive precision.

From assay development to data interpretation, the collaboration was smooth, responsive, and scientifically sound. Their insights helped us move forward with confidence, knowing our model was both robust and translationally relevant.”

Head of R&D Development
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