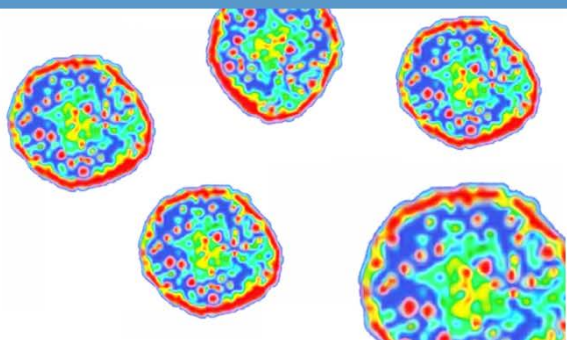


# SERVICES

## 1 PRECISION SOLUTIONS

### EndoNaut



EndoNaut can be used as a tool for the encapsulation and intracellular delivery of bioactive agents to animal cells.

Pharmaceutical and biotechnology companies wish to identify new compounds that potently and selectively modulate functions of target proteins. EndoNaut provides a unique opportunity to undertake drug discovery studies on live cells and greatly enhance in vivo tissue penetration facilitating the understanding of mechanisms of action and molecule selection.

#### PROPERTIES:

- Intracellular release
- High deformability, hence high tissue penetration
- Cells viable with associated metabolic activity for up to fourteen days
- Ability to encapsulate singularly or in combination of water soluble, insoluble bioactive molecules
- Bio-compatibility
- Compatibility with existing equipment

### Example 1

Big Pharma company proprietary molecules, loaded into endoNaut followed by physico chemical characterisation.

#### Example: PEPTIDIC FORMULATION

The partner sent five test bioactive molecules. Each molecule was encapsulated and characterized for size (dynamic light scattering, transmission electron microscopy) encapsulation efficiency, and toxicology. The prepared samples were sent back to the partner for biological screening in their proprietary cellular models.

### Example 2

Big Pharma company proprietary molecules, loaded into endoNaut followed by physical chemical characterisation and in vitro screening.

#### Example: FRAGMENT AB FORMULATION

The partner sent a small library of fragment Ab and positive negative controls that were encapsulated and characterized for size (dynamic light scattering, transmission electron microscopy) encapsulation efficiency, and toxicology. The prepared samples were biologically screened with standard 2D cell culture systems in our facilities to understand the biological effects of these new compounds.

### Example 3

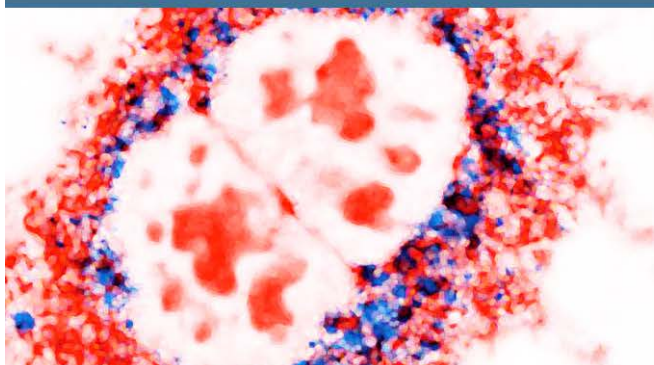
Small Pharma company proprietary molecules, loaded within Endonaut followed by physical chemical characterisation, in vitro and in vivo screening.

#### Example: ORGANIC COMPOUND FORMULATION

The partner sent a water insoluble molecule that was encapsulated and characterized for size (dynamic light scattering, transmission electron microscopy) encapsulation efficiency, and toxicology. The prepared samples were biologically screened with both 2D and 3D cell culture systems by SomaNautix to understand the biological effects of these new compounds.

## 2 PRECISION REAGENTS

### CellLuminate



CellLuminate is a tool to visualise, track and quantify interventions on live cells with no effect on cell toxicity and metabolism.

The non-toxic pH-sensitive vesicle enables nanoparticles to be taken in by the cell - without affecting the cell's metabolic activity.

#### PROPERTIES:

- Longer periods for research on living cells, since live cells remain alive stained for up to 14 days
- Better time-management in research
- Bio-compatibility
- Compatibility with existing equipment