Biomedical

TechTransfer and Ventures

# Cell Signaling Well Culture Plates

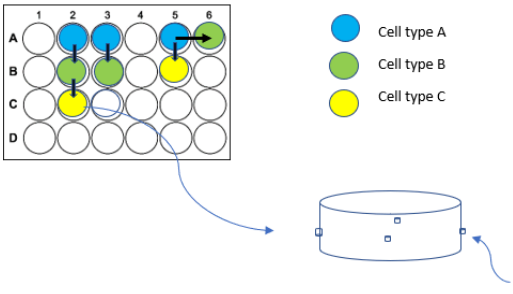
## Enhances the Study of Signaling Pathways

Current technologies for in-vitro studies of cell signaling pathways are limited in their ability to accurately replicate cell-cell communication. Traditional well culture plates do not adequately allow for the diffusion of signal molecules between wells, further restricting the study of these intricate processes.

Researchers at Virginia Commonwealth University have developed Cell Signaling Well Culture Plates as an innovative solution. By modifying traditional well culture plates, this technology allows for cell signal molecules to diffuse between wells, offering a novel approach to understanding cellular behavior and interactions, particularly valuable in studying diseases such as cancer and Alzheimer's where molecular signaling between different types of cells plays a critical role.

### The Technology

Cell Signaling Well Culture Plates are a groundbreaking tool for studying cell signaling pathways, designed with modified wells featuring small holes that allow signal molecule diffusion. Equipped with removable plastic tips, researchers can customize cell-cell communication pathways, creating a more dynamic environment than traditional plates. This innovation enables the study of direct, paracrine, and endocrine signaling, addressing the need for specialized tools to better understand cellular behaviors and interactions, particularly in research on complex diseases like cancer and Alzheimer's.




### Benefits

- Detailed study of cell signaling pathways
- Customizable cell-cell communication
- Novel design not available in standard plates

### Applications

- Pharmaceutical development and testing
- Biotechnology and life sciences research
- Research of cancer and Alzheimer's

**IP Status:**

Provisional patent application has been filed

**License Status:**

This technology is available for licensing to industry for further development and commercialization

**Category:**

Research Tool

**VCU Tech #:**

PET-24-020

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**Additional Information:**

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