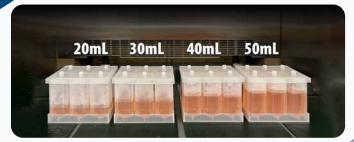


# Mid-Scale Bioprocessing Solutions





Working Volumes Ranging From 20mL to 50mL Per Well



Optimum Growth® Integrated Lid (Patent Pending)

Best use is 1-7 day growth

## **Advancing Beyond Traditional Methods**

The Thomson Optimum Growth® 6-Well Platform significantly improves conventional 50mL spin tube systems by addressing key bioprocess limitations. Our engineered solution allows for larger working volumes while maintaining precise environmental control through better gas exchange and enhanced mixing dynamics. The platform's integrated design ensures stable, contamination-free conditions that are essential for high-quality bioprocessing applications. By removing the handling constraints of traditional spin tubes, the system streamlines operational workflows while providing the consistent, reproducible results required by today's advanced processes.

## **CHO Transient Expression of mAb Up to 50mL**

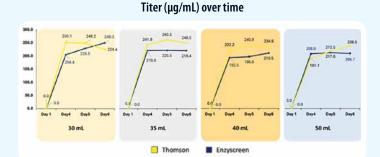
### Study 1

**Large Pharma Customer** 

#### **CHO Transient**

#### **Results:**

Consistent Titer of immunoglobulin G Across All Volumes



In collaboration with a major pharmaceutical manufacturer, we evaluated the platform's performance using a CHO transient expression system for monoclonal antibody production. The study examined immunoglobulin G (IgG) titer across multiple working volumes up to 50mL. Analysis of protein expression data demonstrated consistent IgG titers regardless of culture volume, validating the system's capability to maintain optimal production conditions throughout the working range. These results confirm the platform's ability to support reliable process scaling while preserving critical quality parameters, enabling efficient transition from development to production scales.

## **User-Friendly Format for Maximizing Throughput**

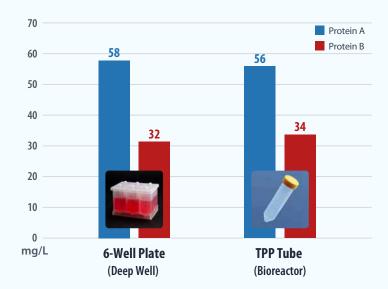
### Study 2

**Biopharma Customer** 

#### Expi293F™ Cells

## Results:

Utilizing Expi293F™ cells in each condition is tested with three replicates



A comprehensive evaluation conducted by a biopharma company compared protein expression efficiency across multiple culture formats using Expi293F™ cells. The study systematically assessed protein production and the study systematically assessed protein production in Thomson 6-well plates, and conventional 50mL spin tubes under standardized conditions. Quantitative analysis of purified protein yields demonstrated that 6-well plate systems achieved equivalent or superior production levels compared to traditional spin tube methods. These results validate the platform's capability to maintain high-level protein expression while offering enhanced throughput capacity and operational flexibility for advanced bioprocessing applications.

# **Large Range in Working Volume for Insect Cells**

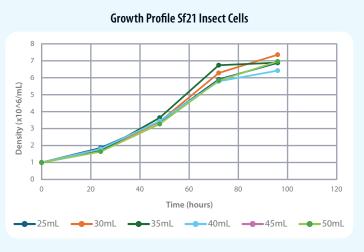
## Study 3

**P**fizer

## **Insect Cells**

#### **Results:**

The design of the plate promotes uniform aeration and nutrient distribution



The experiment from Pfizer validates the platform's capabilities using Sf21 insect cell lines across multiple bioprocessing parameters. The study demonstrated the system's precise environmental control throughout varying working volumes, enabling optimal process development and scale-up operations. Analysis confirmed that the engineered design maintains consistent growth conditions while supporting flexible volume adjustments. These results validate the platform's ability to support sophisticated insect cell applications while delivering the process control and reproducibility essential for advanced bioprocessing workflows.

# Working Volume & Shake Speeds

#### Mammalian & Insect Cell Lines

Well Count	Working Vol.	Shake Speed	Throw
6	20-50mL	225RPM	25mm
24	4-5mL	350RPM	12.5mm
96	500μL	900RPM	3mm

# **Product Recommendations**



Infors™ Sticky Mat System
Can be used on all platforms
(Part# 78113)

## **Optimized Platform Integration**

The Thomson Optimum Growth® 6-Well Platform achieves exceptional operational stability through validated integration with the Infors™ Sticky Mat system (Part# 78113). This engineered solution ensures precise mechanical control at recommended operational speeds of up to 225 RPM, maintaining consistent agitation parameters throughout prolonged cultivation periods.

The Infors™ Sticky Mat technology delivers comprehensive platform stability across all standard metal shaking surfaces and universal tray configurations. This versatile system accommodates up to 24 plates per tray, facilitating efficient scale-up while ensuring process consistency. The integrated securing mechanism guarantees reliable performance during high-throughput operations, supporting streamlined workflow optimization for advanced bioprocessing applications.

## **Enhanced Platform Integration**



Kuhner™ Spring Tray F system (Part# 104825)

The Thomson Optimum Growth® 6-Well Platform offers advanced operational stability due to its validated compatibility with the Kuhner™ Spring Tray F system (Part# 104825). This precision-engineered, spring-loaded mechanism ensures secure positioning while enabling efficient plate handling for high-throughput operations. The system's comprehensive stability design accommodates 24 6-Well Plates per tray, supporting advanced bioprocessing workflows.

The Kuhner™ Spring Tray F integration creates a robust mechanical foundation that preserves positional integrity, even at high agitation speeds. This engineered stability ensures consistent mixing dynamics and reliable cell culture conditions throughout extended cultivation periods. By eliminating potential disturbances from mechanical displacement, the system delivers reproducible performance essential for scaled bioprocessing applications.



Sticks Well on Infors™ Sticky Mat



Run Half or Full Rack Varied Fill From 20-50mL



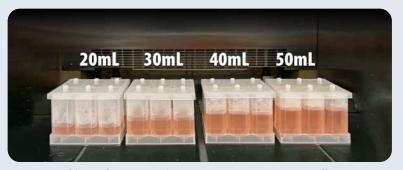


24 6- Well Plates on Infors™ Sticky Mat





24 6-Well Plates on Kuhner™ Spring Tray



Working Volumes Ranging From 20mL to 50mL Per Well



**Optimum Growth® Integrated Lid (Patent Pending)** 



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## **Part Numbers**



Optimum Growth® 6-Well Plate Part #: 931167 | Qty/Case: 10



Optimum Growth® Integrated Lid Part #: 981648 | Qty/Case: 20 (patent pending)