

— — Thomson Instrument Company Presents: — —

THOMSON Solutions™
INSTRUMENT COMPANY At Work

 **OptimumGrowth™**

Pat. US #7,709,251 #7,998,730 UK #2433255

got protein?



Thomson Instrument Company is not affiliated with Corning®, Corning Life Sciences® GE®, Sartorius® Biogen Idec® or their products.

Cell Lines

CHO

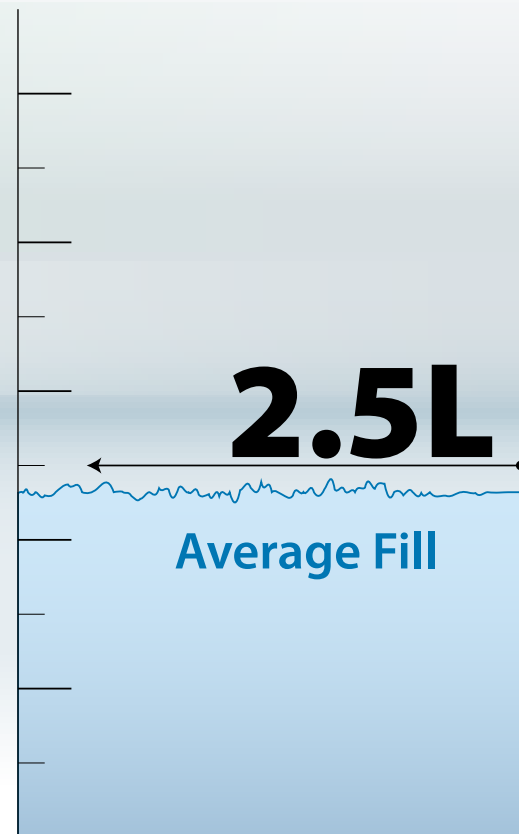
HEK293

INSECT

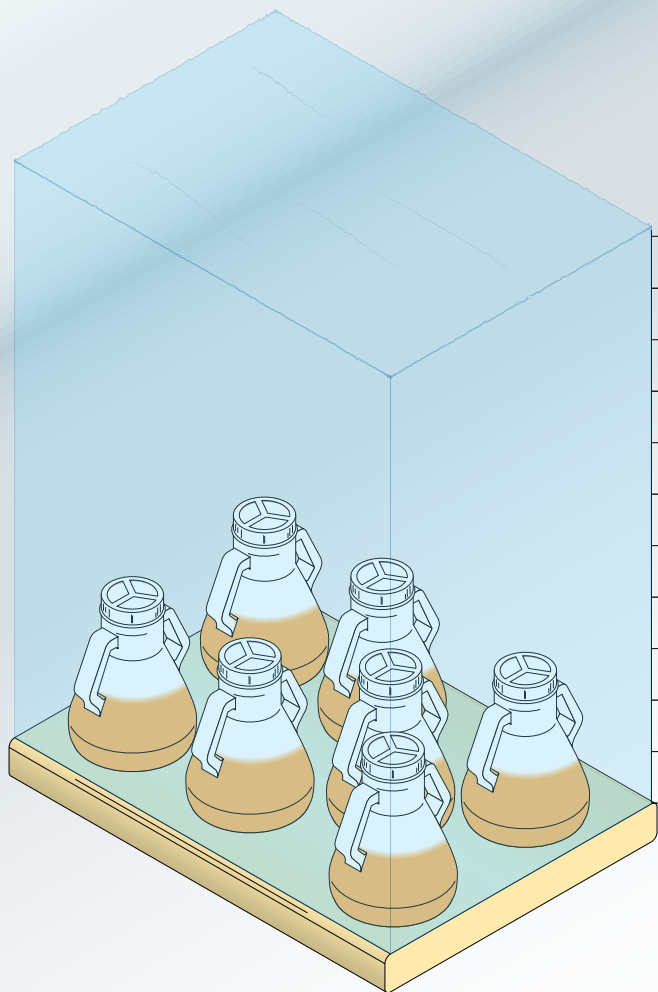
SF-9 High Five™

SF-21 T.ni

HYBRIDOMA



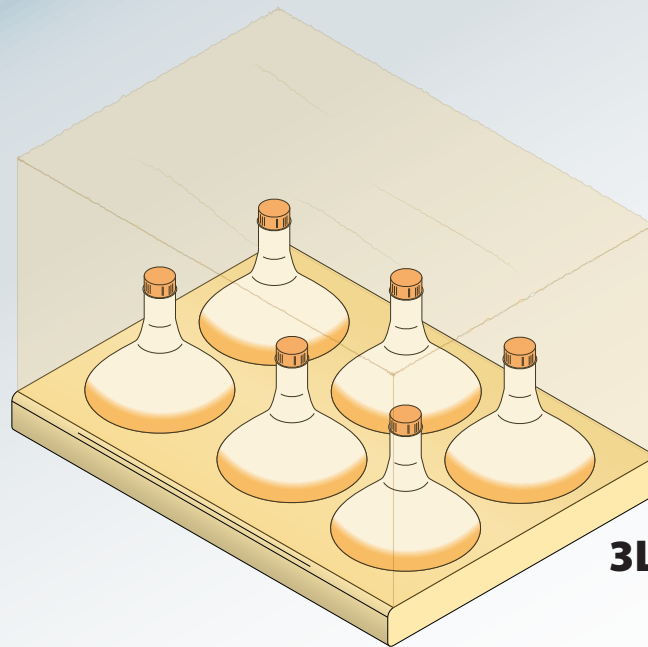
Volume Comparison



17.5L

Optimum Growth™

2.5L Working Volume
 x **7** Flasks
17.5L Output



6L

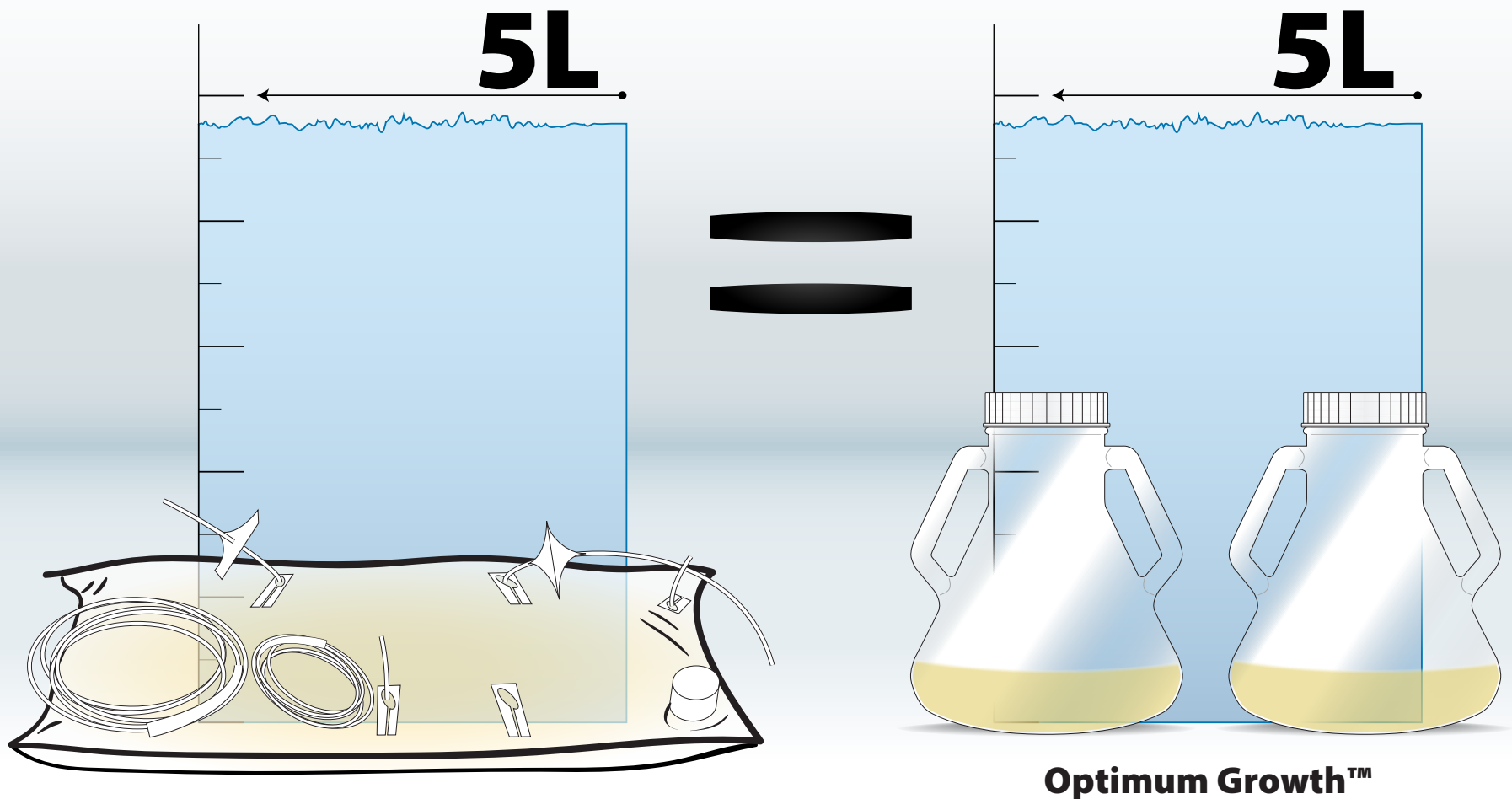


3L Disposable Fernbach

1L Working Volume
 x **6** Flasks

 6L Output

Wave Bag™ Volume Comparison

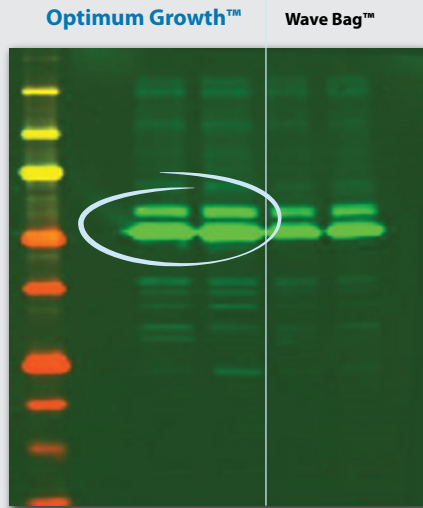


Optimum Growth™ 5L flask vs Wave Bag™

Sf9 Cell Growth

Final Product

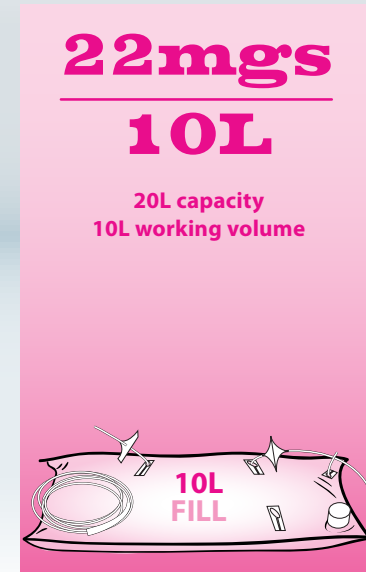
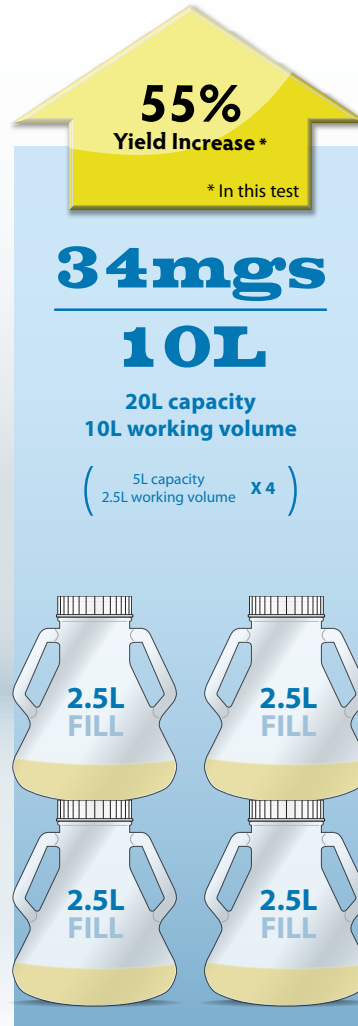
After 4 Step Purification



Membrane Protein from Sf9 Cells

Sf9 cells in a Optimum Growth™ 5L shake flasks
at 4×10^6 cells/ml Final Yield of purified sample 34mg/L
Shaker Speed 110 RPM

Sf9 cells of 10L in a Wave Bag™ at 4×10^6 cells/ml
Final Yield of purified sample 22mg/L
Shaker Speed 25 RPM

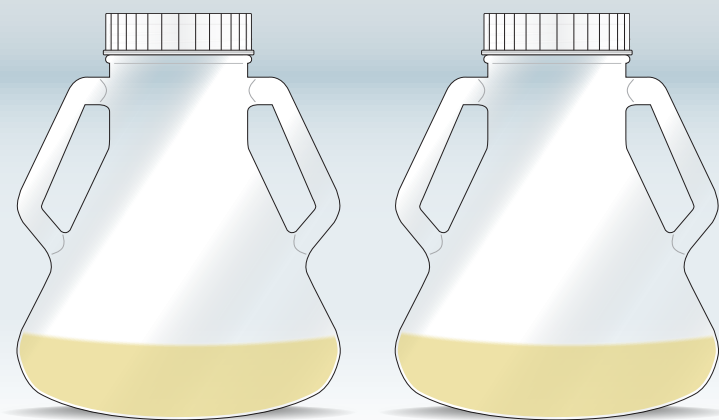
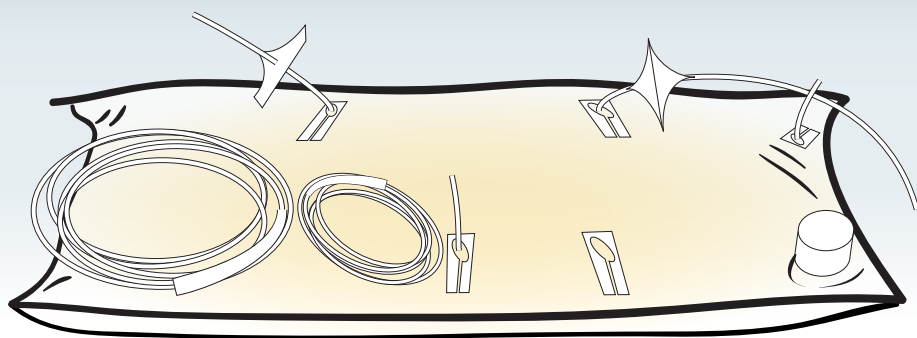


Thomson Instrument Company is not affiliated with GE® or its Wave Bag™. Wave Bag™ comparison may vary with media used, and biological molecule being grown. Results were not done by Thomson Instrument Company, and may vary depending on customer.

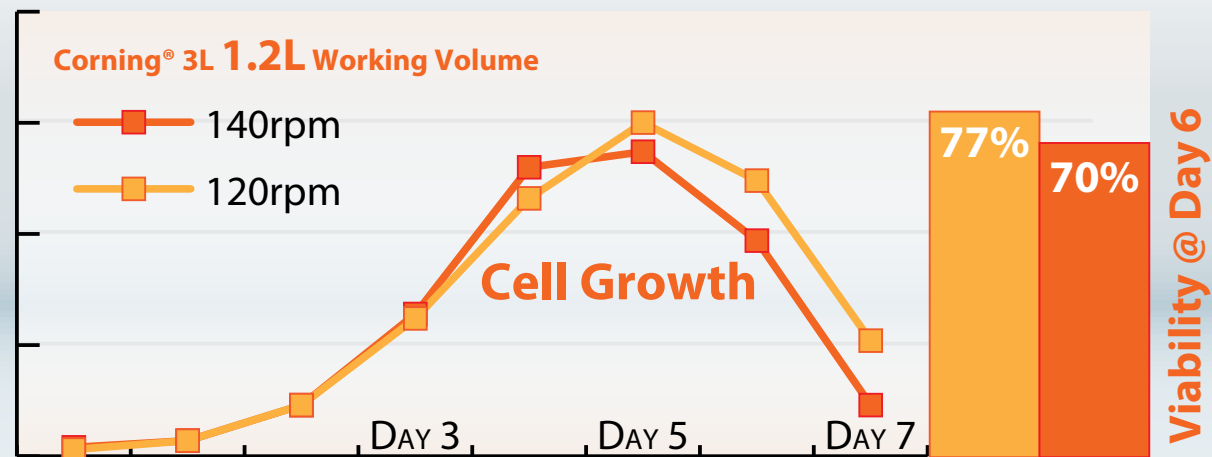
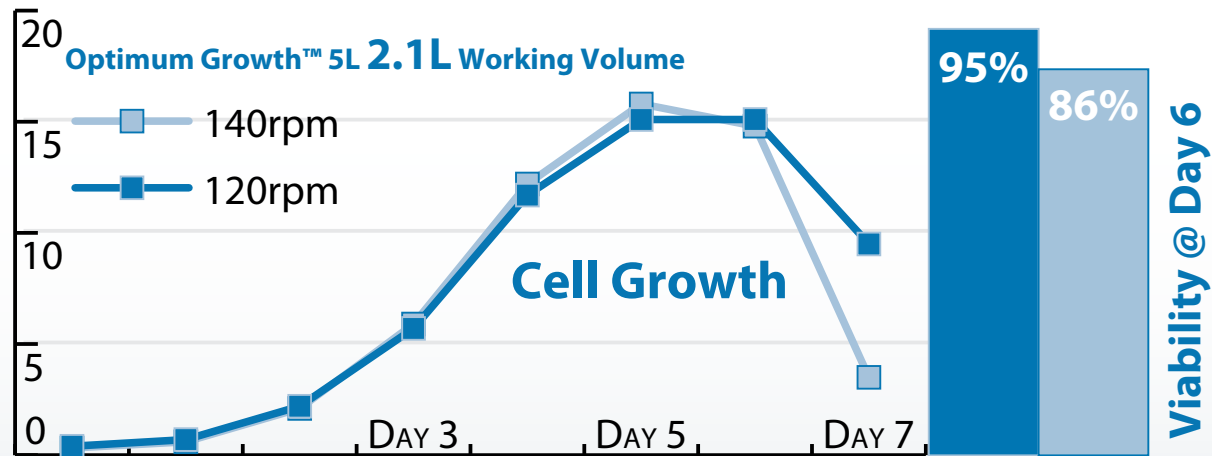
Optimum Growth™ Comparison

Compared to Wave Bag™, Optimum Growth™ flasks are:

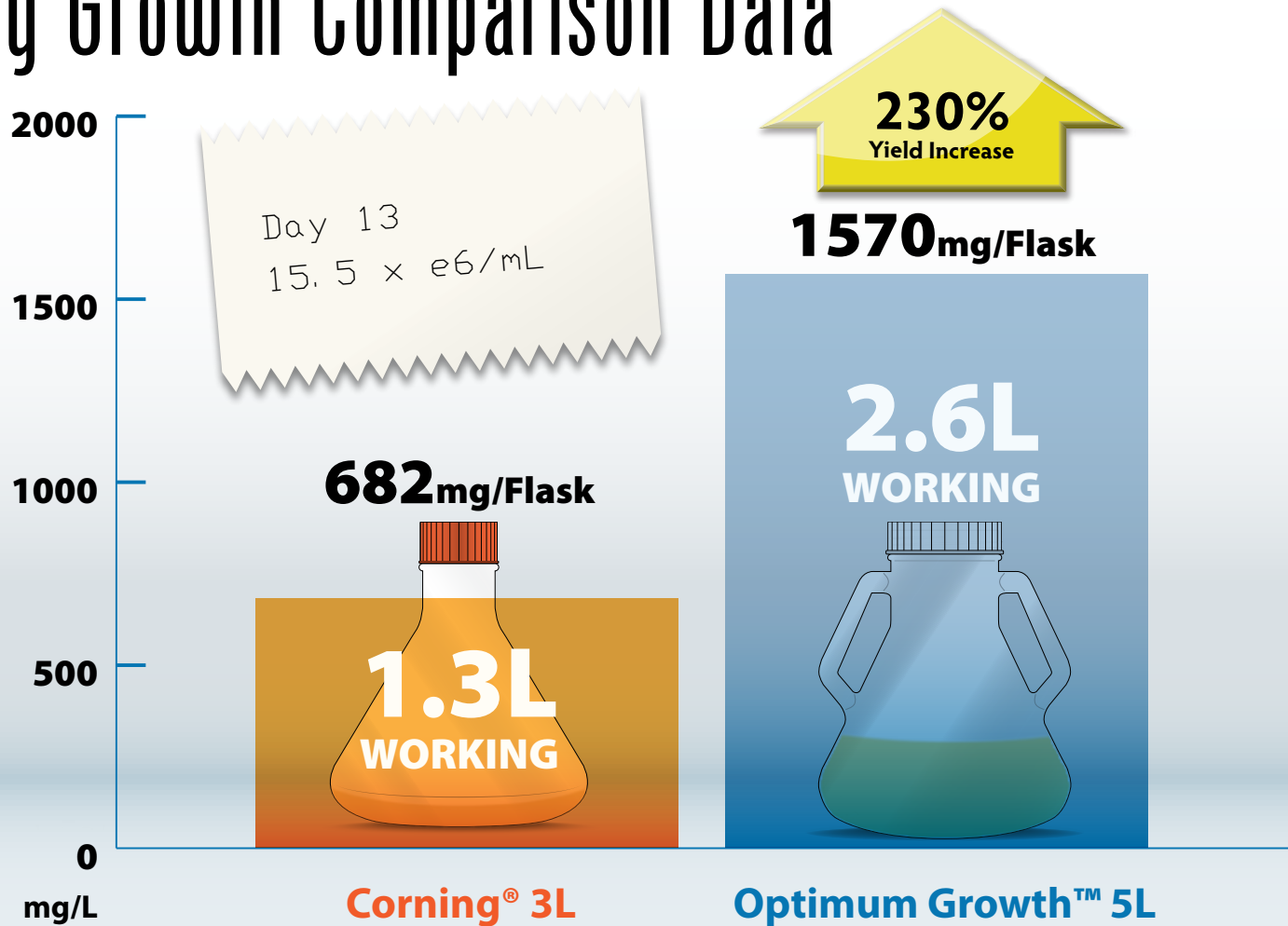
- **Simple to Use**
- **No Custom Filling Equipment Needed**
- **No Custom Rocking Equipment Needed** (Use Standard Shakers)
- **Affordable** (Optimum Growth™ 5L Flasks Are Less Expensive)



Optimum Growth™



CHO Antibody Growth Comparison Data



CHO Cells

Optimum Growth™ flasks in Standard Shaker



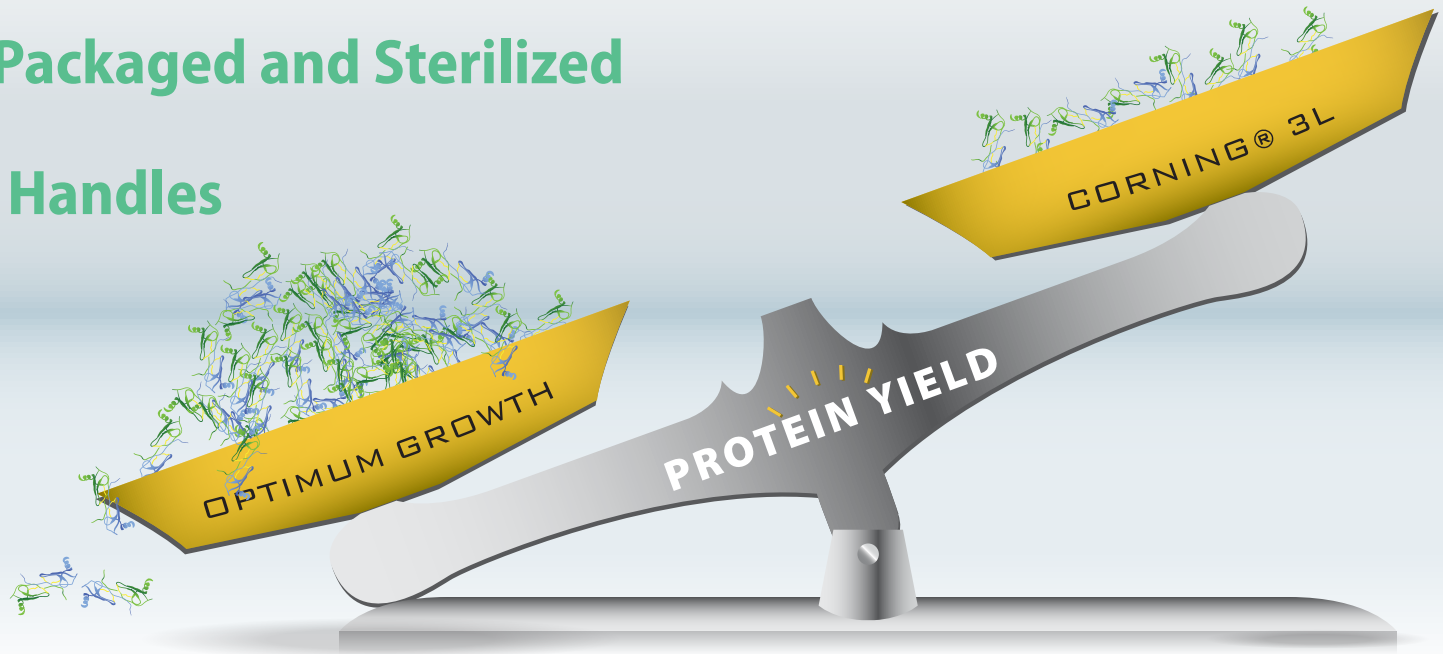
foam Comparison to Corning®*



*Results may vary depending on media and speed used, we have yet to find a case where different media effects foaming differently

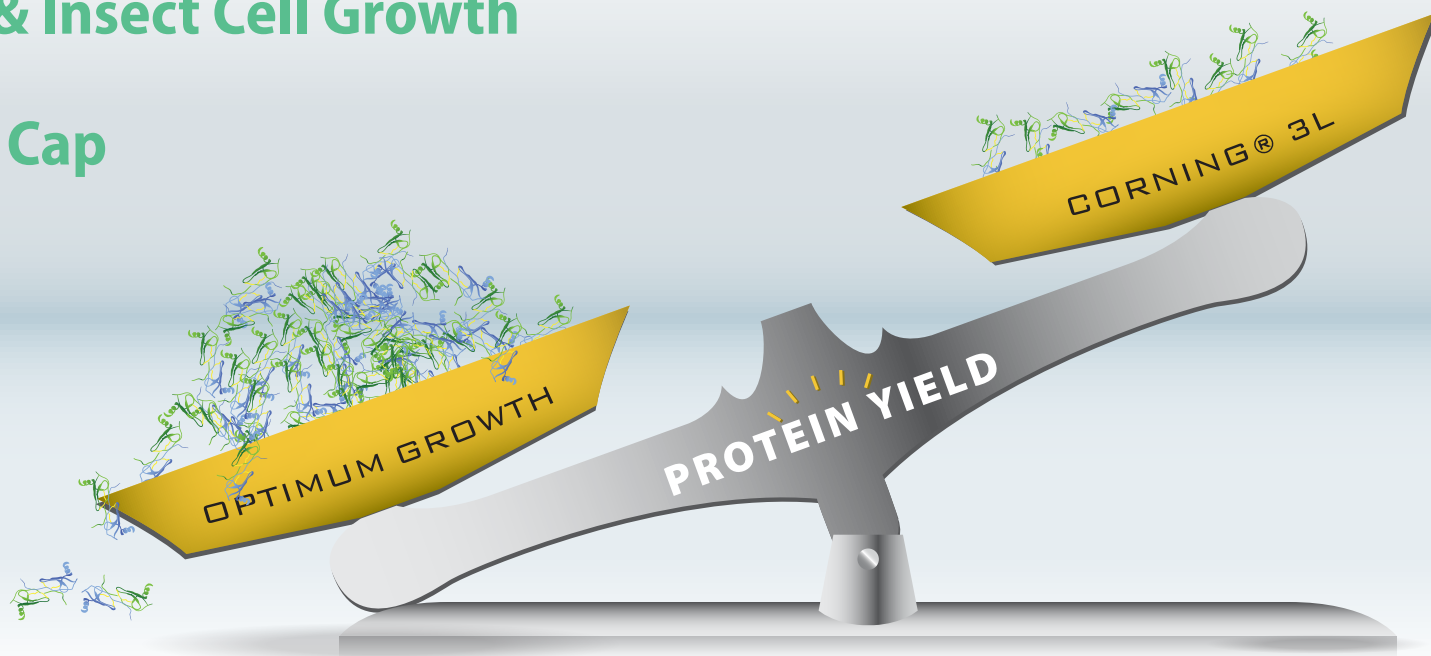
Key features

- Same Footprint as Standard 3L Fernbach Flask
- Suggested Working Volume: 2.5L (Double Capacity)
- Less Foaming than 3L Disposable Fernbach
- Individually Packaged and Sterilized
- Comfortable Handles



Key features

- **Transfer Cap connects directly to Wave Bags™ & other bag manufacturers with 1/8" port**
- **Baffles designed for High Aeration & Low Shear**
- **Mammalian & Insect Cell Growth**
- **.2μM Vented Cap**

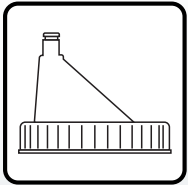




Optimum Growth Flask

5L Optimum Growth Flask w/ .2 μ M Vented Cap
Patented

Case Qty: 4
Part No. 931116



Transfer Cap

Transfer Cap
Patented

Case Qty: 1
Part No. 931596

