CAPRICORN SCIENTIFIC

Insectra Sf

High-Density Cultures. High-Yield Results.

Insect cell systems are powerful tools in recombinant protein and vaccine production. However, successful production strongly depends on the right culture environment.

Insectra Sf is Capricorn Scientific's ready-to-use animal component-free, protein-free medium tailored for Sf9, Sf21, and High Five™ cells. Optimized for ultra-high-density suspension cultures and robust baculovirus expression, Insectra Sf is formulated 100% free of serum or proteins.

KEY BENEFITS OF Insectra Sf

» Ultra-High-Density Growth with Excellent Viability
Enables prolonged cultivation and increased yield in high-density production cultures

» Compatible with all Sf9, Sf21, and High Five™ Cells
Validated across major insect cell lines used in baculovirus expression systems

» High productivity in protein and VLP expression
Delivers strong expression yields enabling robust recombinant protein and virus-like particle production

» Serum-free, protein-free formulation
Minimizes batch-to-batch variability and supports downstream processing and sensitive purification workflows

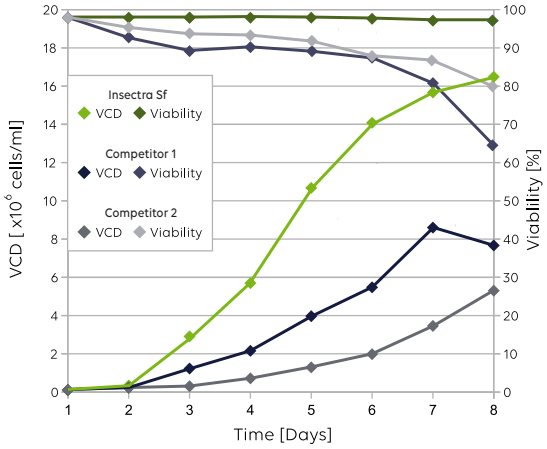
» Scalable ready-to-use medium
Convenient format available in bottles or bags to support scale-up from lab to production

VALIDATED PERFORMANCE OF Insectra Sf
SUPERIOR GROWTH AND PRODUCTION OVER TIME

To evaluate growth kinetics and viability, Sf9 cells were cultured in Insectra Sf and two leading competitor media. All cultures were seeded under identical conditions and maintained for 7 days in suspension. Viable cell density (VCD) and viability were assessed daily using trypan blue exclusion.

Insectra Sf achieved significantly higher viable cell densities while maintaining excellent viability throughout the cultivation period. Competitor media supported only moderate growth, with declining viability after day 5.

Insectra-Sf Supports Ultra-High VCDs



To evaluate expression performance, Sf9 cells cultured in Insectra Sf were infected with a recombinant baculovirus carrying GFP as a model protein. Fluorescence microscopy was performed 24 and 48 hours post-infection.

Insectra Sf delivered high GFP fluorescence intensities, indicating superior infection efficiency and recombinant protein expression.

Fig. 1 Viable Cell Density & Viability over Time
Insectra Sf supports ultra-high VCDs
Sf9 cells cultured in Insectra Sf reached >16 million cells/ml by day 8, outperforming two competitor media.

Sf9 Cells Expressing GFP in Insectra Sf

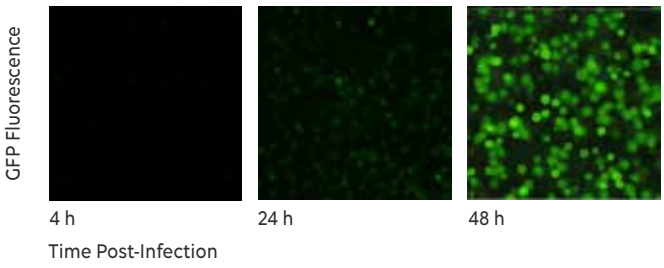


Fig. 2 Recombinant Protein Expression
Sf9 Cells Expressing Baculovirus Vector Based GFP in Insectra Sf. Significant expression visible by 24 h post-infection, with strong GFP signal at 48 h.

CAPRICORN SCIENTIFIC – MANUFACTURING YOU CAN TRUST ON

Insectra Sf is manufactured in our cGMP compliant, ISO-certified facility under strict quality and regulatory standards. Each batch is subject to comprehensive quality control and documentation, ensuring reproducibility and confidence — from development to scale-up.

Capricorn Scientific combines technical expertise with a commitment to quality. When you choose Insectra Sf, you choose more than a medium:

You choose process reliability, performance clarity, and a partner who understands biotech manufacturing.

ORDER INFORMATION

Also available in bags!

PRODUCT	VOL.	CAT.NO.
Insectra Sf Protein-free Medium for Insect Cells with L-Glutamine, with Pluronic™	500 ml	**SF9-500ML**

SCAN FOR MORE INFORMATION

For further support, feel free to contact our experts at ***techservice@capricorn-scientific.com*** *or phone (****+49 6424 944 64 0****).*

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