

ESF AdvanCD™

Chemically Defined Insect Cell Culture Medium

The next-generation insect cell culture medium for improved productivity of your baculovirus expression process.

ESF AdvanCD™ is a 100% chemically defined, animal-origin-free, protein-free, serum-free cell culture medium that does not contain hydrolysates. This proprietary formula is manufactured exclusively by Expression Systems for exceptional performance while improving the consistency and efficiency of your process. ESF AdvanCD medium was developed for robust cell growth in parallel with clonal Sf9 cell lines and also supports the growth of Trichoplusia cell lines.

ESF AdvanCD Medium:

- Supports growth of suspension Sf9 cell lines in excess of 35×10^6 cells/ml
- Enables superior protein expression yields as compared to alternative media formulations
- Demonstrates high reproducibility and lot-to-lot consistency
- Supports production of high titer baculovirus stocks with titers greater than 5×10^9 iu/ml
- Maintains baculovirus titers and reduces aggregation when coupled with VSA (Virus Stabilization Additive)
- Supports scalable baculovirus infection and protein expression in Spodoptera and Trichoplusia cell lines
- Adapted for use with a Sf9 rhabdovirus negative cell line for a fully compliant manufacturing platform
- Ready-to-use liquid formulation, with no supplementation required

Suitable for research use or commercial manufacturing, ESF AdvanCD medium is best used in conjunction with adapted Sf9 and TniPRO cell lines available from Expression Systems. Insect cell lines growing in other commercially available serum-free media may be readily transferred into ESF AdvanCD medium without serial adaptation. ESF AdvanCD is not recommended for adherent cell cultures.

Manufactured to the Highest Standards

ESF AdvanCD Medium is manufactured by Expression Systems in compliance with 21 CFR 820 cGMP guidelines and produced in a facility that is ISO 13485-certified.



Specifications

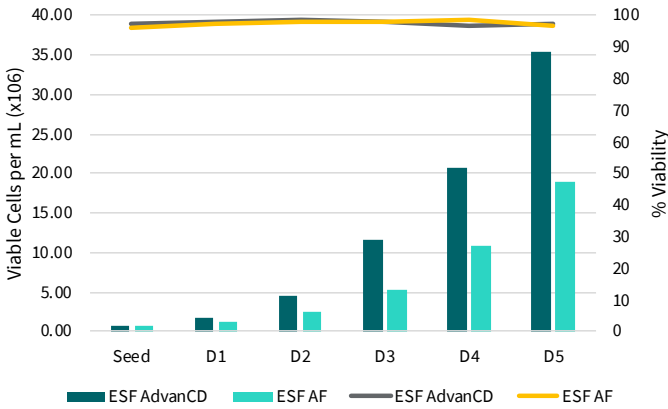
Quantity	1L Bottle
Classification	Animal Origin-Free, Chemically Defined, Protein-Free, Serum-Free
Compatible Cells	Insect Cells
Format	Liquid
Shipping Condition	Ambient
Storage	2-8°C, in the dark
Shelf Life	12 months from the date of manufacture

To learn more, visit [expressionsystems.com](https://www.expressionsystems.com).



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Exceptional Growth of Sf9 Cells in ESF AdvanCD

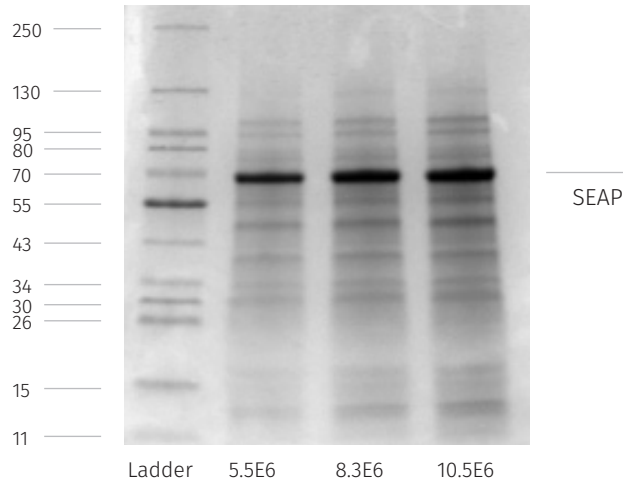
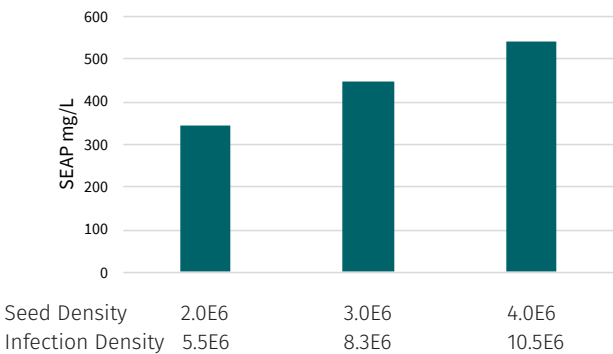


Sf9 cell growth performance in ESF AF medium has traditionally been considered the industry gold standard. Next-generation ESF AdvanCD medium outperforms ESF AF in cell growth and viability to boost your productivity.

Sf9 Growth Data	ESF AdvanCD	ESF AF
Max Density	38.0E6	24.0E6
Seed Density	0.5-0.75E6	0.5-0.75E6
Split Density	4-18E6	4-12E6
Split Frequency	2x per week	2x per week
Average Viability	98.39%	98.10%
Average Diameter (um)	16.33	16.12
Doubling Time (hours)	18.61	22

Increased Expression with Increased Cell Density

Increased culture densities at infection correlate to increased protein expression as measured by quantitative assay (left) and Coomassie (right).



Additional Products

ESF AdvanCD	Chemically Defined Medium in 1L Bottles	PN 54-018-01
Sf9 RV-Free	Rhabdovirus negative Sf9 cells	PN 94-409
Sf9 in AdvanCD	Sf9 cells for high density growth	PN 94-030
TniPRO in AdvanCD	TniPRO culture adapted to ESF AdvanCD	PN 94-031
Virus Stabilization Additive (VSA)	Supplement for baculovirus stocks	PN 95-010-020 PN 95-010-100

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