

# Transfection Medium

Expression Systems' Transfection Medium is designed to complement ESF 921 and ESF AF insect cell culture media for the cotransfection or transfection step in baculovirus vector production. Transfection Medium is a serum-free and animal-free formulation that facilitates vector DNA uptake by the insect host cells. Realize higher titers by using a formulation designed to work with ESF 921 and ESF AF.

- Serum-free, animal-free formulation works seamlessly with ESF 921 and ESF AF
- Appropriate for PEI or lipofection mediated transfection
- Optimized for use with Expres<sup>2</sup> TR Transfection Reagent
- Increases virus vector production and transient expression
- Available in 20 mL or 100 mL bottles
- In stock for immediate shipment

## Specifications

Media type	Serum-free, animal-free liquid, 1X
Shipping condition	Ambient
Storage condition	2-8°C, protect from light
Use-by date	One year from date of manufacture



Insect and Mammalian  
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and Services

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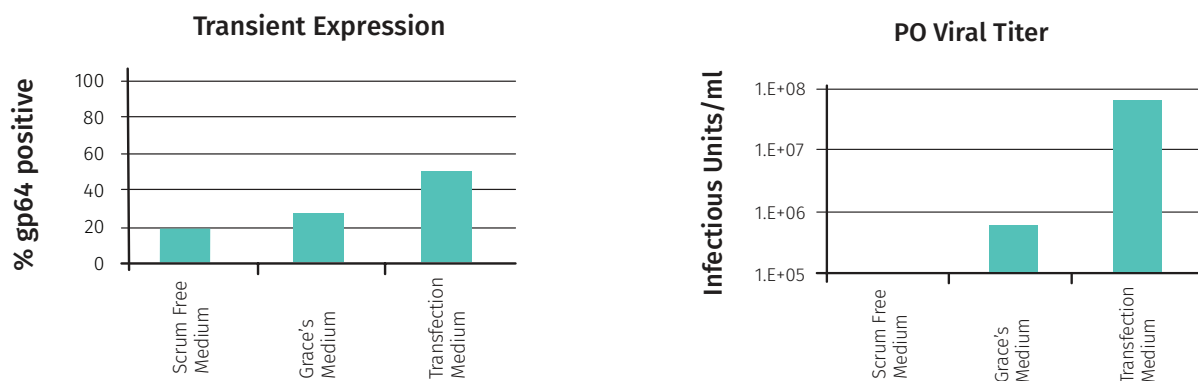
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Expression Systems' Transfection Medium was compared to older technology that uses Grace's medium for the performance of cotransfection to produce baculovirus vectors. Serum Free Medium was included as a control. Resulting virus titers from the cotransfection were several logs higher using Transfection Medium as compared to other media. Transient expression was also determined as a measure of DNA uptake. Again, Transfection Medium resulted in significantly better results with the percentage of gp64 expressing cells being at least two-fold higher than other media.



Sf9 cells were grown in Serum Free Medium and plated into individual wells of a deep well block at a concentration of  $2 \times 10^6$  cells per 100  $\mu$ l per well. DNA and a lipofection reagent were incubated together in 200  $\mu$ l of test media (either Serum Free Medium, Grace's Medium or Expression Systems' Transfection Medium) for 30 minutes. DNA mixture was added to cells and volume was brought up to 1 ml in test media. Cell suspension was incubated for four hours at 27° C while shaking. At the end of the incubation, the volume of each well was brought up to 4 ml with Serum Free Medium and cultured for four days. Determination of the P0 (i.e., product of the cotransfection) infectious units (IU) viral titer of the supernatant was performed using the gp64 flow cytometric method. Transient expression of gp64 was determined for the cultured cells by staining with gp64-PE.

	Cell Culture Media and Reagents		Molecular Tools
96-001	ESF 921™ Insect Cell Culture Medium, Protein Free	95-055	Transfection Reagent
99-300	ESF AF™ Insect Cell Culture Medium, Animal Free	91-001	BestBac™ 1.0 Linearized Baculovirus DNA
96-200	ESF 921™ Delta Series Insect Cell Culture Medium, Methionine Deficient	91-002	BestBac™ 2.0 $\Delta$ v-cath/chiA Linearized Baculovirus DNA
96-299	ESF 921™ Delta Series Insect Cell Culture Medium, Custom Amino Acid Deficient	91-100	BestBac™ 1.0 Baculovirus Cotransfection Kit
95-020	Transfection Medium	91-200	BestBac™ 2.0 $\Delta$ v-cath/chiA Baculovirus Cotransfection Kit
95-006	Production Boost Additive	97-101	Baculovirus Titering Kit
98-001	ESF SFM Serum Free Cell Culture Medium For Hybridoma, CHO & 293 Cells	97-201	gp64-PE Antibody

## About Expression Systems

Headquartered in Davis, California, Expression Systems specializes in the products, services and support necessary for high quality baculovirus protein production. Our unique focus in BEVS applications helps researchers and clinicians around the world work at the highest level of consistency. At any step in the process, from gene synthesis to protein purification, Expression Systems helps achieve best-in-class results.

