Mammalian and Insect Cells

PRODUCT NEWS

- Preadapted for growth in GIBCO[™] Serum-Free Media (SFM)
- Performance-tested for gene expression systems
- Save time and costs associated with adaptation
- Convenient, reliable supply

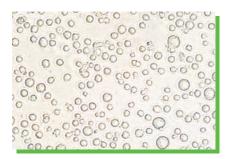


Figure 1. CHO Cells preadapted to CD CHO. Day 5 in culture.



Figure 2. 293-H Cells preadapted to 293 SFM. Day 3 in culture.

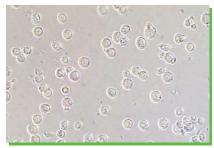


Figure 3. High-Five™ Cells preadapted to Express Five® SFM. Day 3 in culture.

Invitrogen now offers nine cell lines preadapted for growth in a new generation of GIBCO™ serum-free media (SFM) that provide consistent, reliable performance in both small and large systems.

The five mammalian and four insect cell lines save significant time in the laboratory and eliminate the costs associated with adaptation. Growth rates are equivalent or superior to other commercially available cells.

Invitrogen is the leading provider of products for cell culture, including optimized specialty media. The addition of cells to our offerings now provides researchers with the convenience and economy of ordering high-quality media and cells from one reliable source.

Features of performance testing:

- · Mycoplasma and sterility tested
- Freeze tested for post-recovery growth and viability
- Master banks identity tested, including isozyme testing and karotyping
- Total passage number and number of SFM adaptation passages reported for each lot*
- Cryo-recovery, expansion, and cryopreservation protocols enclosed with each shipment

Mammalian Cell Lines

293-F and 293-H, SFM Adapted Primary embryonal human kidney cells, transformed with human adenovirus type 5

* Does not apply to High-Five™ Cells

and adapted for growth in 293 SFM, express high levels of protein and demonstrate superior transfection efficiencies with Lipofectamine™ Reagent and Plus™ Reagent. The 293-F line is characterized by above-average growth rates. The 293-H line is easily converted to monolayer culture for adherent application.

CHO-S, SFM Adapted—Chinese hamster ovary cells, grown in CD CHO, demonstrate superior transfection efficiencies with Lipofectamine™ 2000 Reagent.

COS-7L, SFM Adapted—African green monkey kidney cells derived from CV-1 simian cells and transformed by an SV40 mutant, adapted to growth in VP-SFM. They amplify and overexpress transfected genes and demonstrate superior transfection efficiencies with Lipofectamine™ Reagent and Plus™ Reagent.

Cryopreserved in Defined Keratinocyte-SFM—Primary Human Keratinocytes are processed and frozen in GIBCO™ Defined Keratinocyte-SFM and therefore effectively adapted to the medium. Upon recovery from cryopreservation, the cells establish fully confluent cultures within five days. Lifespan is performance-tested for 16 population doublings, with most lots demonstrating 20+ doublings.

Primary Human Keratinocytes,



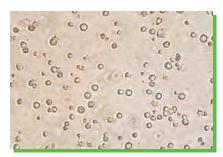


Figure 4. D. Mel 2 (or Schneider S2) Cells preadapted to suspension growth in Drosophila-SFM. Day 2 in culture.

Insect Cell Lines

Sf9, SFM Adapted—Clonal isolate derived from the parental *Spodoptera frugiperda* cell line IPLB-Sf21-AE, adapted to suspension growth in Sf-900 II SFM, are commonly used for expression of recombinant proteins using the Baculovirus Expression Vector System (BEVS).

Sf21, SFM Adapted—Isolate from Spodoptera frugiperda ovarian cells, adapted to suspension growth in Sf-900 II SFM, are commonly used for expression of recombinant proteins using the Baculovirus Expression Vector System (BEVS).

D. Mel 2 (or Schneider S2), SFM Adapted— Isolate from late-stage *Drosophila melanogaster* embryos, adapted to suspension growth in Drosophila-SFM,

suspension growth in Drosophila-SFM, are popularly used for transient or stable expression of recombinant proteins with the Calcium Phosphate Transfection kit.

High Five™, SFM Adapted—Clonal isolate derived from the parental *Trichoplusia ni* BTI-TN-5B1-4 cell line, adapted to suspension growth in Express Five® SFM, is optimized for growth of High Five™ and other *Trichoplusia* cell lines. The High Five™ cell line is commonly used for the expression of recombinant proteins using the Baculovirus Expression Vector System (BEVS).

Ordering Information

Type	Cell Line	Cat. No.	Size	SFM Adapted	Cat. No.	Size
Insect	D. Mel 2	10831-014	3 ml	Drosophila-SFM	10797-017 10797-025	500 ml 1,000 ml
Insect	High Five™ Cells	3855-02	$3 \times 10^6 \text{ cells/ml}$	Express Five® SFM	10486-025	1,000 ml
Insect	Sf9	11496-015	3 ml	Sf-900 II SFM	10902-096 10902-088 10902-070	500 ml 1,000 ml 10 L
Insect	Sf21	11497-013	3 ml	Sf-900 II SFM	10902-096 10902-088 10902-070	500 ml 1,000 ml 10 L
Mammalian	293-F	11625-019	3 ml	293 SFM	11686-029	1,000 ml
Mammalian	293-Н	11631-017	3 ml	293 SFM	11686-029	1,000 ml
Mammalian	COS-7L	11622-016	3 ml	VP-SFM	11681-020	1,000 ml
Mammalian	CHO-S	11619-012	3 ml	CD CHO	10743-011 10743-029	500 ml 1,000 ml
Mammalian	Primary Human Keratinocytes	12332-011	1 ml	Defined Keratinocyte-SFM	10744-019	500 ml

Related Products

Products	Cat. No.	Size	
Blasticidin S HCl	R210-01	50 mg	
Calcium Phospate Transfection Kit	K2780-01	75 reactions	
Cellfectin® Reagent	10362-010	1 ml	
Geneticin® (G418 Sulfate), liquid	10131-035 10131-027	20 ml 100 ml	
Geneticin® (G418 Sulfate), powder	11811-023 11811-031	1 g 5 g	
Hygromycin B	10687-010	20 ml	
Lipofectamine™ Reagent	18324-111 18324-012 18324-020	0.5 ml 1 ml 4×1 ml	
Lipofectamine™ 2000	11668-027 11668-019	0.75 ml 1.5 ml	
Plus™ Reagent	11514-015	0.85 ml	
Zeocin™	R250-01 R250-05	1 g 5 g	

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