

IT SFM insect cell culture media include IT SFM 03 and TE 030. They can support high-density growth of Sf9, Sf21 and H5 cells in suspension cultures, and the production of recombinant protein and viral vectors.

## Key Benefits

- Animal component-free, serum-free
- Low hydrolysate concentration provides better consistence lot-to-lot
- Support high-density cell growth and high production of protein and viral vectors
- Customization of products and packaging is available



## Passaging of Insect Cells

★ Sf9 and H5 cells were passaged in IT SFM 03 successfully.

## Growth of Insect Cells

★ Sf9 and H5 cells achieved robust growth in IT SFM 03.

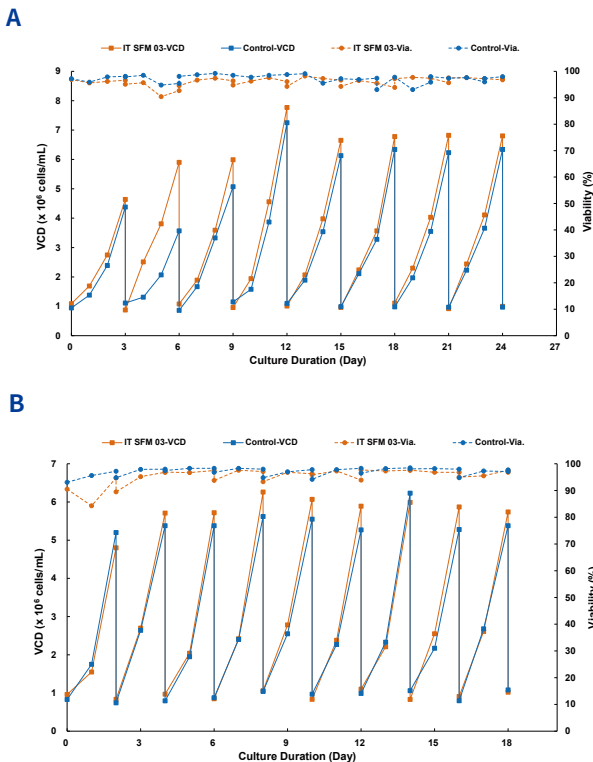


Figure 1. Passaging stability of insect cells in IT SFM 03 and a competitor's medium (Control) was determined by seeding Sf9 (A) and H5 (B) cells into 30 mL cultures in 125 mL shaker flasks at  $1.0 \times 10^6$  cells/mL. Sf9 cells were passaged every three days, H5 cells were passaged every two days, and the viable cell density and the viability were measured every day.

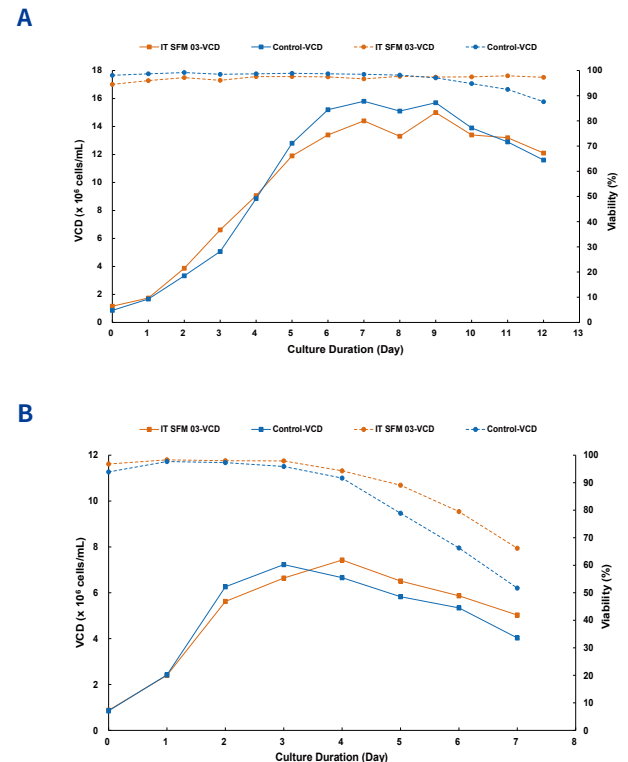


Figure 2. The growth curves of Sf9 (A) and H5 (B) cells in IT SFM 03 and a competitor's medium (Control) were determined by seeding 30 mL cultures in 125 mL shaker flasks at  $1.0 \times 10^6$  cells/mL. The cells were cultured in batch, and the viable cell density (VCD) and the viability were measured every day.

## Preparation of Seed Virus

★ Higher titer of seed virus was achieved in IT SFM 03.

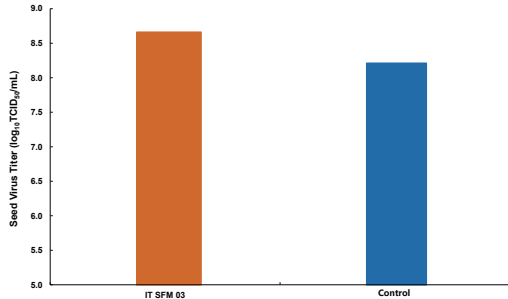


Figure 3. The seed viruses (baculoviruses) were prepared by Sf9 cells in IT SFM 03 and a competitor's medium (Control) respectively. The titer was measured through TCID<sub>50</sub> method.

## Expression of Recombinant Protein

★ Higher infection efficiency and protein expression level were achieved in IT SFM 03.

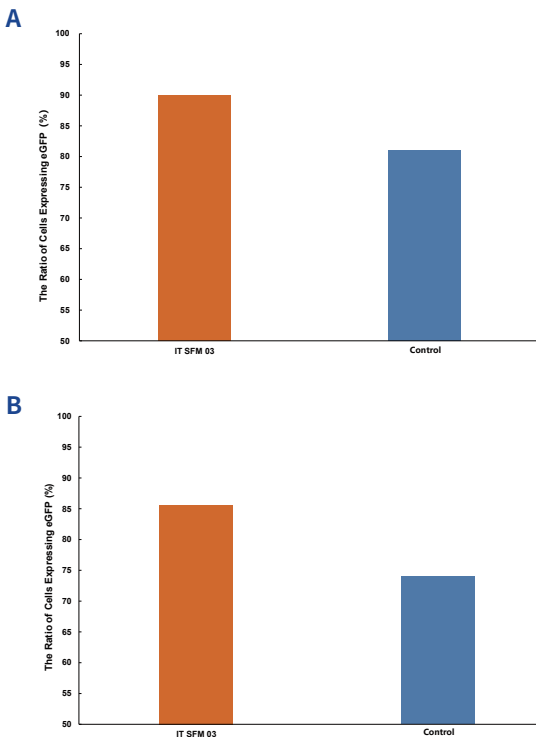


Figure 4. The infection efficiency of seed viruses in IT SFM 03 and a competitor's medium (Control) was determined by infecting Sf9 (A) and H5 (B) cells with seed virus respectively. The infection efficiency was measured by the ration of cells expressing eGFP on day 3 after infection.

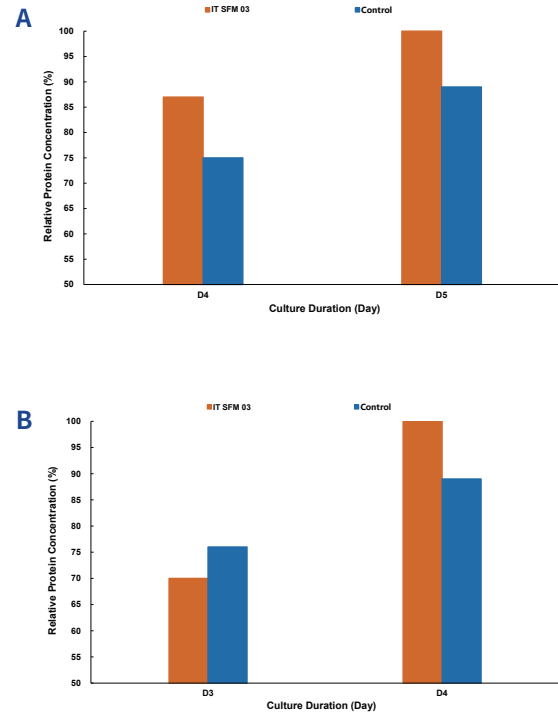


Figure 5. E2 protein of classical swine fever virus was expressed in IT SFM 03 and a competitor's medium (Control) by using Sf9 (A) and H5 (B) cells respectively. The titer of E2 protein was measured daily from day 3 post-infection. The data shown above was normalized against the titer of E2 protein in IT SFM 03 on day of harvest.

## Ordering Information

Medium	Catalog No.	Form	Size
IT SFM 03	11009-1353	Dry Powder	2L, 5L, 10L, 50L, 100L, Customized
TE 030	99156-1329	Dry Powder	2L, 5L, 10L, 50L, 100L, Customized

お問い合わせ先

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