

SF003 MDCK Serum-Free Media

Independently developed serum-free media especially for the production of influenza vaccine with MDCK cells

The BioEngine R&D team started the research in techniques for the culture of MDCK cells in 1995. Based on years of technology accumulation and technical service experience of multiple influenza projects in the manufacturing site, BioEngine is constantly updating MDCK media formula. At present, the latest SF003 is suitable for the rapid adaptation of MDCK cells, supporting high-density culture, as well as the high-efficiency proliferation of avian influenza and swine influenza viruses, and has been applied in several industrial production projects.

Features

- Serum free
- Support rapid serum-free suspension adaptation of adherent MDCK cells
- Animal-derived component-free
- Support high-efficiency proliferation and high-density culture of MDCK cells
- Protein free
- Support high-efficiency proliferation of avian influenza and swine influenza viruses



SF003 MDCK Serum-Free Media

Advantages

- Distinctive culture results proven in numerous studies on avian influenza virus subtypes;
- Optional powder media for use in large-scale manufacturing with easy preparation procedures;
- Powder media capable of a single batch size of 100,000 L;
- Excellent inter-batch consistency (CPK* > 1.33);
- Full traceability by EU-certified ISO13485:2016 Quality Management System.

*CPK is a standard index to state the capability of one process.

CPK>=1.33: the process is capable and meets specification limits. The higher the CPK, the better.

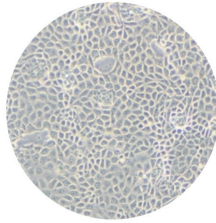
Ordering Information

| Product Name | Cat. No. | Form | Size | Package | Notes |
|------------------------------|------------|--------|------|---------|--|
| SF003 MDCK Serum-free Medium | EXP0107203 | Powder | 10L | Bag | Support high-efficiency proliferation of avian influenza and swine influenza viruses |
| | EXP0107202 | Powder | 100L | Bag | |
| | EXP0107201 | Powder | 200L | Bag | |

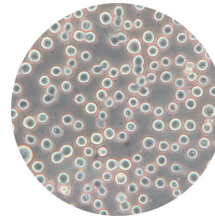
Performance

Cell growth

Before adaptation

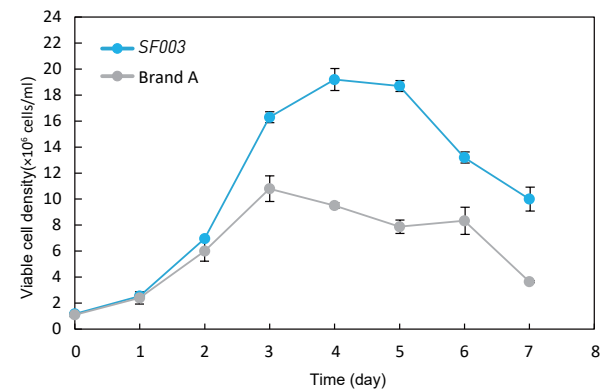
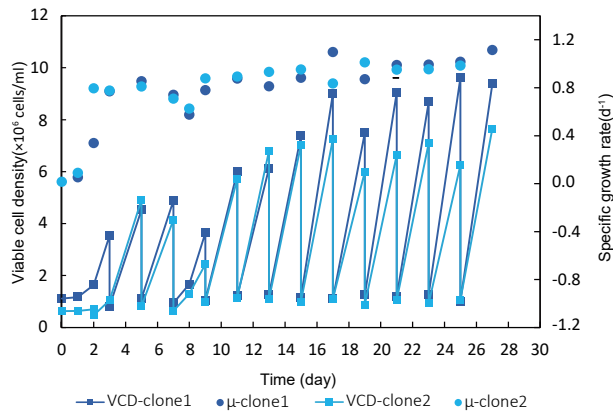


After adaptation



When adherent MDCK cells are directly transferred to the suspension culture system with *SF003* media, the cells could rapidly adapt to suspension culture and grow steadily, with a doubling time of 18-24 h; after adaptation, the suspension cells are full in shape and uniform in size, and grow as single scattered cells without cell clustering.

SF003 media could support a culture density of up to 2.0×10^7 cells/ml of MDCK cells, about double compared with serum-free media of other brands.

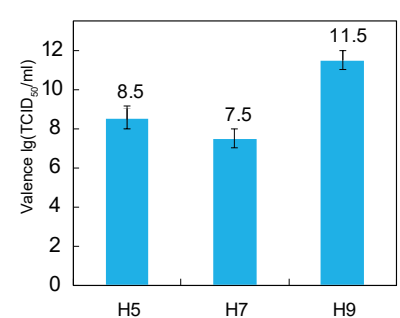
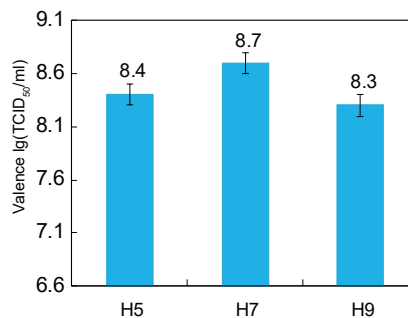
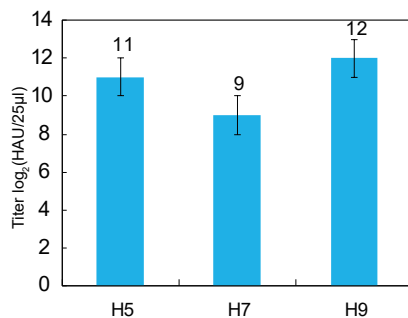


Virus production

When *SF003* media are used to produce various flu virus subtypes, the HA titer could reach up to $2^9 \sim 2^{12}$ HAU/25 μl.

When *SF003* media can be used to produce various flu virus subtypes, the virus titer could reach up to $2^7 \sim 2^{12}$ TCID₅₀/ml.

When *SF003* media can be used to produce various flu virus subtypes, the HI titer could reach up to $2^7 \sim 2^{12}$ HIU/25 μl.



30 years of ingenuity on creating a novel drive for cell culture



BioEngine Official Website

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