



Virus expression

Achieve exceptional performance with our new vaccine media panel

Transform your Vero vaccine production with innovative media solutions

Discover a new and innovative media panel that can help accelerate vaccine development and streamline the scale-up process. The Gibco™ Adherent Kidney (AK) Media Panel is a state-of-the-art media panel designed to seamlessly boost productivity and accelerate your vaccine production without significant disruption or major process changes.

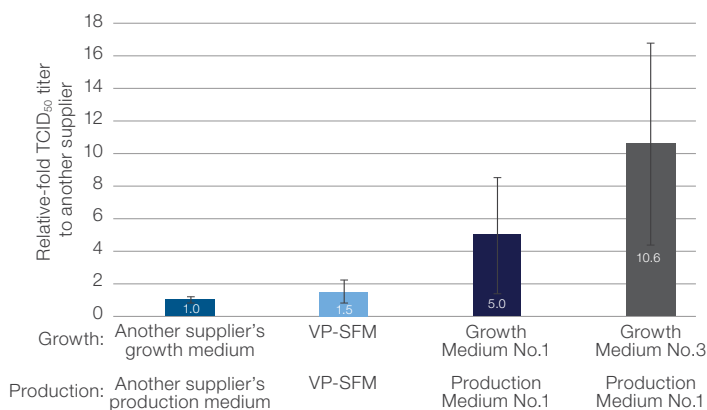
The panel consists of six diverse, serum-free media formulations—four media designed to promote cell growth and two aimed at boosting viral production. These media are specifically targeted toward Vero cell applications, but with additional scope to be used in other popular adherent kidney cell lines such as MDCK, MDBK, and BHK-21. The media also have broad adherent surface compatibility; for instance they can be used in microcarrier, 2D, and iCELLis™ packed-bed bioreactors.

We understand that finding a medium that can support the high performance you seek for vaccine manufacturing can be a challenge. To facilitate this search, we have developed a media panel with your operational needs in mind. Our innovative approach assists in a smooth transition to serum-free production, helping to ensure a simplified supply chain, minimize variability, and provide consistent quality. Furthermore, all formulations in the Adherent Kidney Media Panel are chemically defined or contain minimal concentrations of peptones to optimize performance and reduce variability. The panel is purposefully designed to help streamline your vaccine workflow, helping developers achieve exceptional performance.

Adherent Kidney Panel Medium	Animal origin-free (AOF)	Serum-free	Peptone-free	Contains AOF peptone
Growth Medium No. 1	•	•	•	—
Growth Medium No. 2	•	•	•	—
Growth Medium No. 3	•	•	—	•
Growth Medium No. 4	•	•	—	•
Production Medium No. 1	•	•	•	—
Production Medium No. 2	•	•	•	—

Our panel excels in the industry

To evaluate the Adherent Kidney Media Panel, we conducted a study to assess how this product performed against similar media solutions.



Throughout the analysis, the Adherent Kidney Media Panel formulations supported higher performance in both growth and viral titers versus another supplier's offering (serum-based formulations) and the existing Gibco™ VP-SFM. In the figure above, we found that both Growth Medium No. 1 and No. 3 resulted in higher titers when used alongside Production Medium No. 1 compared to both VP-SFM and another supplier's medium. In fact, titers over 10-fold higher were achieved with Growth Medium No. 3 when compared to another supplier's medium.

With the Adherent Kidney Medium Panel, formulations that will maximize performance can be evaluated and identified more efficiently.

Advantages of a media panel

The full potential of your process efficiency, regardless of your current project scale, can be unlocked with our advanced media panel. Using this panel can revolutionize your operations with significant advantages.

- **Accelerate processes:** A media panel can expedite processes by eliminating trial and error, rapidly identifying the optimal formulation and feed
- **Increase productivity and yields:** Panels enable higher titers and increased productivity without disrupting your current processes

- **Access critical nutrient information:** Compare multiple media formulations to discover key process drivers that impact performance
- **Improve cost efficiencies:** By fine-tuning your formulations and scale-up processes, using a panel can help you achieve more efficient operations while minimizing costs and resource consumption

A flexible solution

The Adherent Kidney Media Panel can help meet your needs throughout the vaccine development timeline, from research to cGMP manufacturing. The panel offers diverse options to expedite your process at any operational scale.

By choosing a Gibco™ media panel with the proprietary Gibco™ Advanced Granulation Technology™ (AGT™) dry powder media format, you can streamline and ensure consistent scale-up without compromising quality. Unlike traditional liquid formats, the AGT format delivers dependable results with reduced lot-to-lot variability during large-scale production.

Addressing your challenges

The Gibco™ vaccine product portfolio addresses challenges with Vero cell cultures. The Adherent Kidney Media Panel achieves optimal titers efficiently and minimizes resource requirements for medium selection. It supports implementing a nutritionally optimized media and feed solution for your cell type.

Expert support at every stage

Thermo Fisher Scientific offers extensive knowledge and expertise, providing dedicated support throughout the vaccine manufacturing process. From development to production, we provide technical guidance for experimental protocols and data analysis. Alongside the panel, our supporting services help ensure you stay on track to achieve your vaccine production goals.

Find out more about how utilizing the Adherent Kidney Media Panel can elevate your vaccine processes at thermofisher.com/akmp

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