# Culturing HEK 293 FT cells

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### Contact person

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### Organisation

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**Country** Belgium
**Geographical Area** Brussels Region


## SCOPE OF THE METHOD

| | |
|---|---|
| **The Method relates to** | Human health |
| **The Method is situated in** | Basic Research, Translational - Applied Research |
| **Type of method** | In vitro - Ex vivo |
| **Specify the type of cells/tissues/organs** | Human embryonic kidney 293 FT cells |

## DESCRIPTION

### Method keywords

Culturing
Transfection
Viral production
High viral titer

### Scientific area keywords

Viral production
High viral titer
Clinical translation
Cellular reprogramming

### Method description

Human embryonic kidney (HEK) 293 FT cells is a celline that is very easy to culture and is used to obtain high viral titers. “293” is a reference to the 293$^{th}$ experiment wherein the cell line was discovered. A transfection with an adenovirus type 5 DNA fragment took place, causing the cell line to express E1A adenoviral gene. This stimulates the transcription of specific viral genes, resulting in a high production of viral proteins. “T”

means that the HEK293 cell line is transfected with the SV40 T antigen, also stimulating the production of viral proteins. “F” stands for a fast growing HEK 293T strain with a high transfection efficiency.

### Lab equipment

Biosafety cabinet;
Microscope;
Incubator.

### Method status

History of use

## PROS, CONS & FUTURE POTENTIAL

### Advantages

High viral titer;
Easy to culture;
Fast growing;
Easy to transfect.

### Challenges

Use of serum.

## REFERENCES, ASSOCIATED DOCUMENTS AND OTHER INFORMATION

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