

# pPLUS® AAV-Helper,

a Novel Helper Plasmid  
for AAV Production



## Product Information

The pPLUS® AAV-Helper is a novel helper plasmid designed for AAV production. This plasmid has been optimized for triple transfection of HEK293 cells in suspension with FectoVIR®-AAV and can be used with various commercial HEK293 lines and for the production of diverse AAV serotypes. A synergistic effect is obtained when pPLUS® AAV-Helper is used with Polyplus® transfection reagents.

The use of pPLUS® AAV-Helper improves the quality of viral particles (empty | full ratio and infectious titer) produced through triple transfection.

## Features and Benefits

- A novel pHelper for use with FectoVIR®-AAV
- Improved viral particle infectivity (TU titers)
- Improved viral particle quality (empty | full ratio)
- Compatible with various production systems (transfection reagents, cell lines, and serotypes)
- Free of hexon-associated precursor and fiber sequences

# Introduction

## Relevant Applications

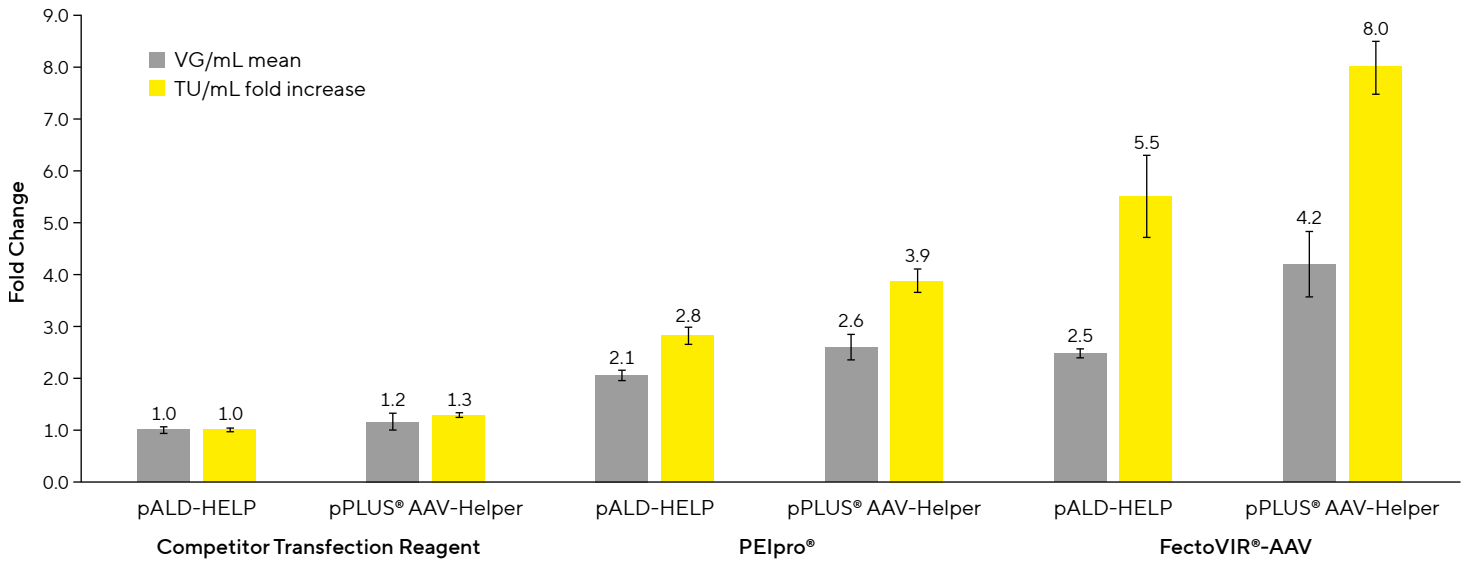
- Cell and gene therapy
- AAV production
- Academic research

## Relevant Process Steps

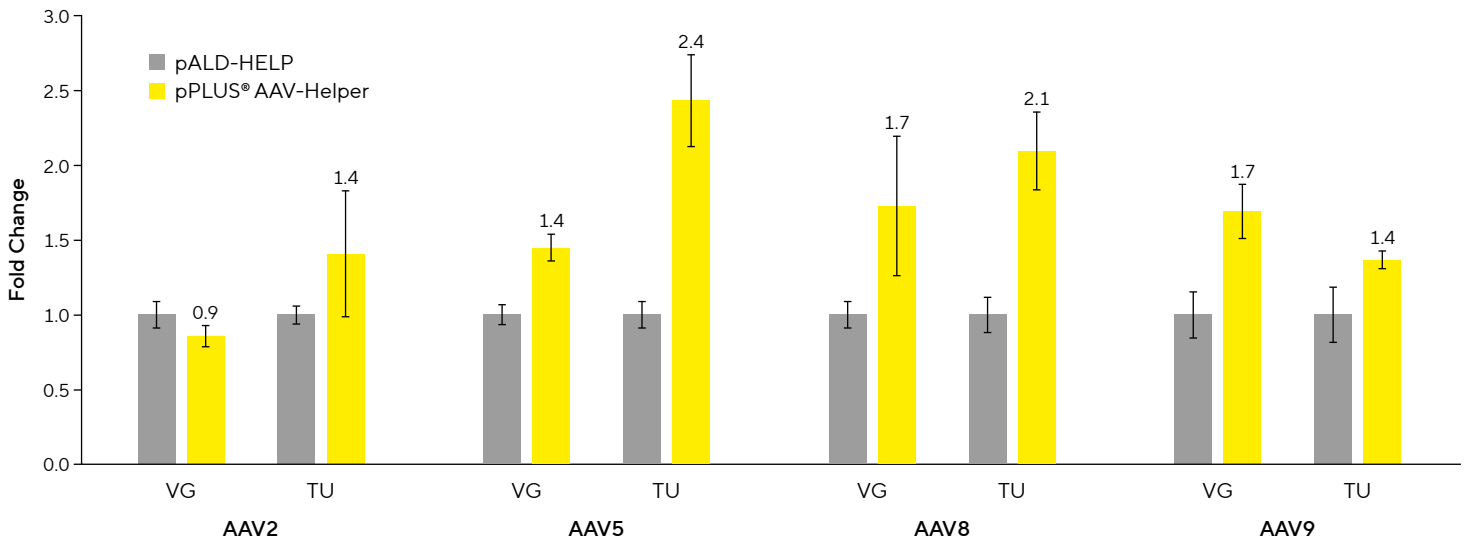
- Upstream process
- Transfection

## Performance Data

**Figure 1:** Optimized Titers When Using FectoVIR®-AAV in Combination With pPLUS® AAV-Helper

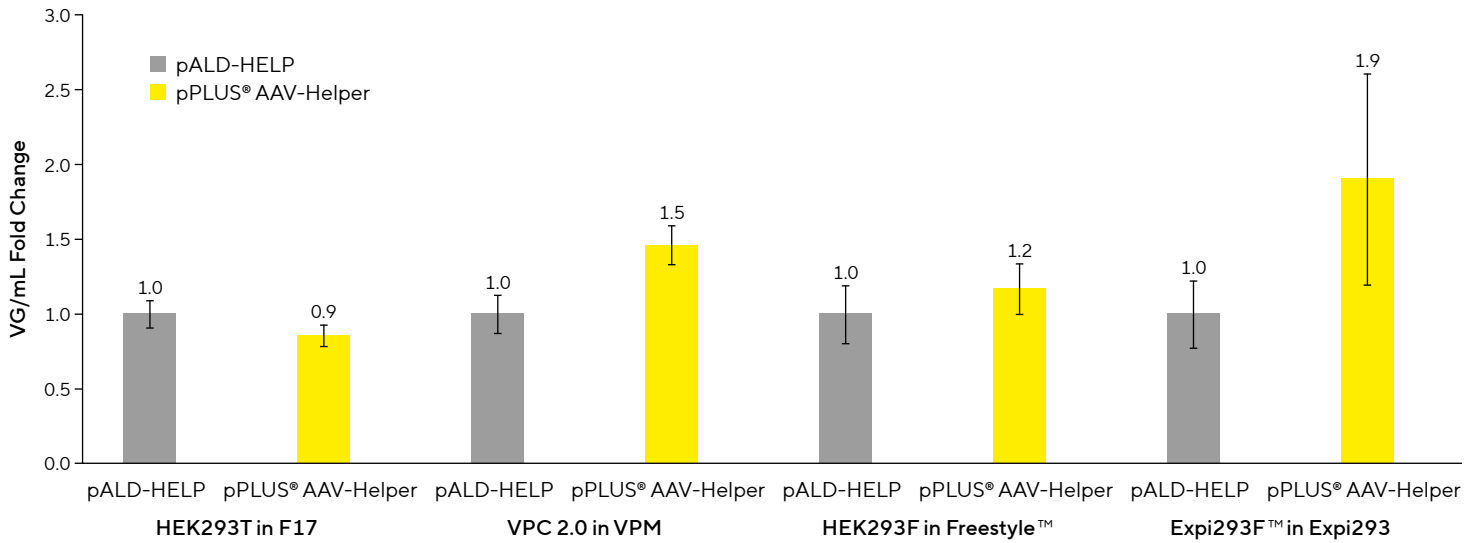


**Figure 2:** Titer (vg/mL) and Infectivity (TU/mL) Improvement With pPLUS® AAV-Helper Across Serotypes



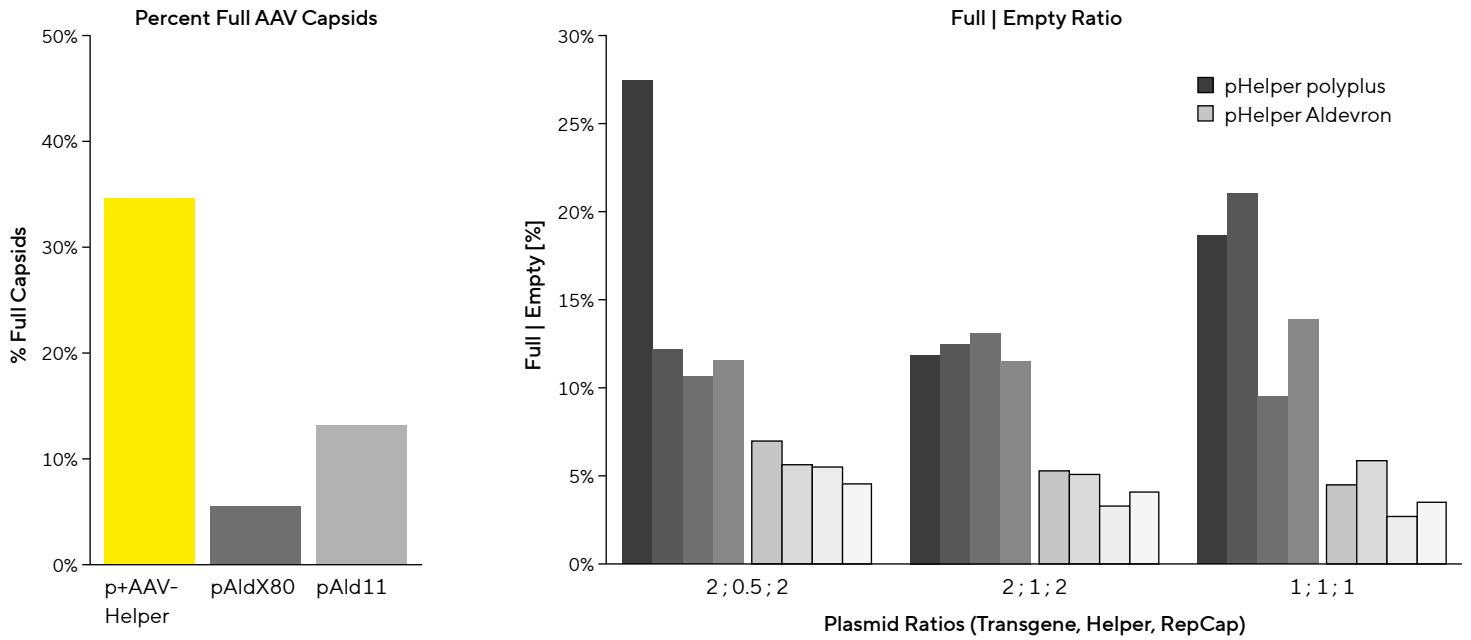
Note. AAV2, AAV5, AAV8 and AAV9 were produced in HEK293T cells adapted in suspension in F17 medium and transfected with FectoVIR®-AAV. Transduction assay was performed on HT-1080 cells.

**Figure 3: AAV2 VG Titers Across Cell Lines**



Note. AAV2 were produced using various HEK293 lines grown in their reference medium and transfected with FectoVIR®-AAV. Improvement of titers are shown as fold increase in reference to pALD-HELP.

**Figure 4: Improvement of F | E Ratio With pPLUS® AAV-Helper**



Note. AAV5 produced in suspension HEK293 cells

Note. AAV2 produced in VPC2.0 cells

# Technical Specifications

Attribute	pPLUS® AAV-Helper 1 mg	pPLUS® AAV-Helper 10 mg	pPLUS® AAV-Helper 100 mg
Vial volume	1 mL	10 mL	100 mL
Appearance	Liquid	Liquid	Liquid
Storage temperature	-20 °C	-20 °C	-20 °C

## Ordering Information


Item	Quality Grade	Volume	Order Number
pPLUS® AAV-Helper 1 mg	R&D	1 mg vial	101000181
pPLUS® AAV-Helper 10 mg	R&D	10 mg vial	101000182
pPLUS® AAV-Helper 100 mg	R&D	100 mg vial	101000183
pPLUS® AAV-Helper 1 mg	HQ	1 mg vial	101000211
pPLUS® AAV-Helper 10 mg	HQ	10 mg vial	101000212
pPLUS® AAV-Helper 100 mg	HQ	100 mg vial	101000213

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