



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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### Description

Adeno-Associated Virus serotype 2 (AAV2) is the best characterized AAV serotype. Nearly all recombinant AAV serotypes utilize the AAV2 inverted terminal repeats (ITRs). AAV2 requires the expression of Heparan Sulfate Proteoglycan (HSPG) on the surface of host for cells for binding and internalization. Of nearly all the discovered AAV serotypes, AAV2 has the best transduction efficiency in cell culture and is the best tool for in vitro studies.

These AAV particles constitutively express the firefly (*Photinus pyralis*) luciferase under the control of a CMV promoter.

### Application(s)

- Use as a positive control for transduction
- Optimize transduction assays and track protein expression over time

### Serotype

Wild-type AAV Serotype 2

### Formulation

AAV was produced in HEK293-AAV cells and is supplied in PBS-MK (PBS Magnesium-Potassium) buffer containing 0.01% Pluronic F68.

### Purification

The purity of the AAV particles was confirmed to be greater than 90% by staining with One-Step Lumitein™ UV Protein Gel Stain (Biotium 21005-1L). Purity will vary with each lot; the exact value will be provided with each shipment.

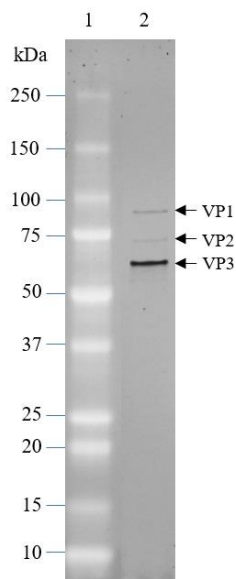


Figure 1. Purified AAV2 Luciferase particles.

Staining of a 4-20% SDS-PAGE gel. The protein ladder is in lane 1, and  $2 \times 10^9$  GC (genome copy number) of AAV is shown in lane 2. AAV viral proteins VP1, VP2, and VP3 are labelled.

### Titer

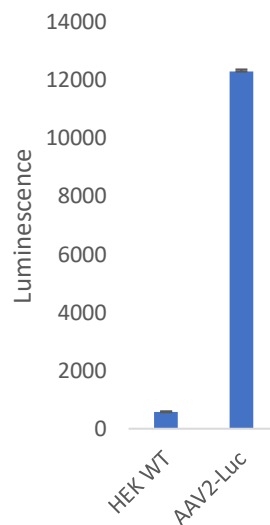
Two vials (50  $\mu$ l x 2) of AAV at a titer  $\geq 1 \times 10^{12}$  TU/ml. The titer is determined by qPCR and will vary with each lot; the exact value will be provided with each shipment.

**Storage**

AAV is shipped with dry ice. For long-term storage, it is recommended to store AAV at  $-80^{\circ}\text{C}$ . Avoid repeated freeze-thaw cycles. Titers can drop significantly with each freeze-thaw cycle.

**Biosafety**

Recombinant AAV is inherently replication-deficient and not known to cause any human diseases. Additionally, following transduction, AAV vectors exist episomally and do not integrate into or disrupt the host cell's genome. AAV requires the use of a Biosafety Level 1 facility. BPS Bioscience recommends following all local, federal, state, and institutional regulations and using all appropriate safety precautions.

**Validation Data**

*Figure 2. Luciferase activity of HEK293 cells transduced by AAV2 Luciferase particles.*

$1 \times 10^5$  cells/well were transduced in a 6-well plate with AAV2 Luciferase at an MOI of  $2 \times 10^4$ . After 72 hours of transduction, transduced cells or parental HEK293 cells were seeded in a 96-well plate at a density of  $2 \times 10^4$  cells/well, and luciferase activity was measured using the ONE-Step™ Luciferase Assay System (BPS Bioscience #60690).

**Troubleshooting Guide**

Visit [bpsbioscience.com/lentivirus-faq](https://bpsbioscience.com/lentivirus-faq) for detailed troubleshooting instructions. For all further questions, please email [support@bpsbioscience.com](mailto:support@bpsbioscience.com).

**Related Products**

<i>Products</i>	<i>Catalog #</i>	<i>Size</i>
AAV2 ZsGreen	78444	50 $\mu\text{l}$ x 2
AAV5 ZsGreen	78447	50 $\mu\text{l}$ x 2
AAV2 Luciferase-eGFP	78462	50 $\mu\text{l}$ x 2
AAV9 Luciferase-eGFP	78468	50 $\mu\text{l}$ x 2
AAV2 Luciferase-mCherry	78471	50 $\mu\text{l}$ x 2
AAV8 Luciferase-mCherry	78476	50 $\mu\text{l}$ x 2