

## **Product datasheet**

# AAV6 VP1 + VP2 + VP3, recombinant proteins, set

#### Short overview

**Cat. No.** 72006

Quantity 10 µg each protein

**Concentration** 100 μg/ml (VP1: 1.19 μM, VP2: 1.45 μM, VP3: 1.61 μM)

### **Product description**

Formulation Liquid, 6 M urea in PBS

Source Escherichia coli

Molecular Weight VP1: 83.6 kDa, VP2: 68.5 kDa, VP3: 61.8 kDa (calculated Mw from aa sequence)

**Purity** > 95% (determined by SDS PAGE)

Product description N-terminal His-tagged (MGSSHHHHHHHSSGLVPRGSH) recombinant AAV6 capsid proteins VP1

+ VP2 + VP3

Purification Ni-NTA chromatography

Storage -80°C

Intended use Research use only
Application Dot blot, SDS PAGE, WB

## **Applications**

**Dot Blot** 100 ng, depending on primary antibody and detection method

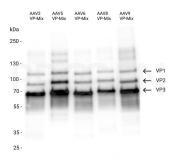
SDS PAGE 1 µ

Western Blot (WB) 5-20 ng, depending on primary antibody and detection method

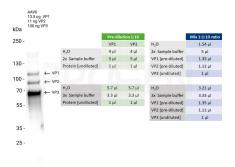
#### Background

The AAV capsid consists of three capsid proteins, i.e. VP1, VP2 and VP3, which differ in their N-terminus and encapsulate the genomic ssDNA. In native virus particles, the three proteins form subunits with a ratio of 1:1:10 (VP1:VP2:VP3), in a total number of 60 subunits per capsid. This set of recombinant AAV6 VP1, VP2 and VP3 can be used to create a mixture with the precise molar ratio of 1:1:10 to compare the protein composition of the viral capsid in your sample by protein detection methods, e.g. western blot. All three recombinant AAV6 capsid proteins are available as set (Cat. No. 72006) or as individual proteins (Cat. No. 640836, 640837, 640838). Note: please find an example how to prepare western blot samples in the pipetting scheme below. Aliquots of the remaining samples can be stored at -80°C for reuse. Set content: Cat. No. 640836 AAV6 VP1, recombinant protein Cat. No. 640837 AAV6 VP2, recombinant protein Cat. No. 640838 AAV6 VP3, recombinant protein

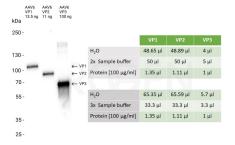
#### **Product images**



Western blot analysis of recombinant AAV2 VP proteins (Cat. No. 72001), recombinant AAV5 VP proteins (Cat. No. 72005), recombinant AAV6 VP proteins (Cat. No. 72006), recombinant AAV8 VP proteins (Cat. No. 72008) and recombiant AAV9 VP proteins (Cat. No. 72009) with B1 antibody (Cat. No. 690058). Western blot analysis was performed on the precise molar ratio of 1:1:10 (13.5 ng VP1:11 ng VP2:100 ng VP3) combined in one lane. The PVDF membrane was blocked with 5% milk in PBST for 1 h at RT. The primary antibody anti-AAV VP1/VP2/VP3, B1 (Cat. No. 690058) was diluted in blocking buffer (antibody concentration 500 ng/ml) and incubated for 1 h at RT. The secondary antibody anti-mouse IgG HRP was also diluted in blocking buffer (antibody concentration 200 ng/ml) and incubated for 1 h at RT. The bands were visualized by chemiluminescent detection using Pierce ECL Western Blotting Substrate.



Pipetting scheme for western blot analysis using a mix of the AAV6 capsid proteins (Cat. No. 640836, 640837, 640838). To create a VP mixture with the molar ratio 1:1:10 (VP1:VP2:VP3), please pre-dilute VP1 and VP2 1:10 to yield a final concentration of 10  $\mu$ g/ml (green table). Pipette the pre-diluted VP1 and VP2 proteins and mix them with the undiluted VP3 protein in your sample buffer and water (blue table). The example with 2x and 3x sample buffer and the required volumes are indicated in the pipetting scheme. Thus, in one lane, 10  $\mu$ l of the VP mix can be loaded onto the SDS PAGE and analyzed by Western blot using the B1 antibody (Cat. No. 690058, Cat. No. 61058-488, Cat. No. 61058-647).Undiluited = 100  $\mu$ g/ml, pre-diluted = 10  $\mu$ g/ml



Pipetting scheme for western blot analysis using the AAV6 capsid proteins (Cat. No. 640836, 640837, 640838) in separate lanes. To analyze the molar ratio of 1:1:10, it is recommended to load VP1, VP2 and VP3 as described in the pipetting scheme above. Therefore, the indicated volumes of the proteins (concentration  $100 \mu g/ml$ ) should be diluted with the appropriate amount of sample buffer and distilled water.  $10 \mu l$  of each solution can be separately loaded onto the SDS PAGE and analyzed by Western blot using the B1 antibody (Cat. No. 690058, Cat. No. 61058-488, Cat. No. 61058-647).