

**Product Information**

**RightZAP1.2**

Research use only

**Catalog No:** ZR-02

**Lot No:** 0411

**Contents:**

20 µg DNA, 0.5 µg/µl  
in TE pH 7.5

**Storage:** -20°C

**Features and Applications:**

RightZAP1.2 DNA is a 29.8 kb linear DNA fragment that encompasses bp 3504-right end of the Ad5 genome. The E3 region is deleted (2.7 kb). The DNA was purified from a cosmid. It is used in combination with the shuttle vector pZAP1.1 to construct replication-deficient adenoviruses containing

transgenes in place of the E1 region of the Ad5 genome. The maximum transgene capacity of the resulting virus is 7.9 kb.

**Quality Control Assays:**

**Ligation:**

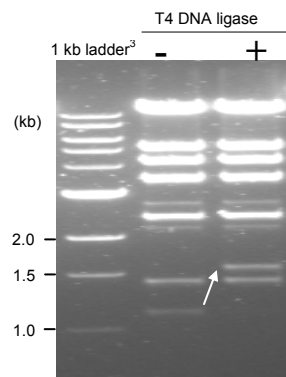
The following reaction was set up:

- 2 µl RightZAP1.2
- 2 µl Control Left Arm (ΔE1)
- 4 µl H<sub>2</sub>O
- 1 µl T4 DNA Ligase buffer
- 0.5 µl *PacI* (10 u/µl)<sup>1</sup>
- 0.5 µl T4 DNA Ligase<sup>2</sup>

**Total: 10 µl**

The reaction was performed for 1 hour at room temperature and stopped by inactivating the T4 Ligase for 10 min. at 65°C. The ligation product was digested with *BstXI*. This enzyme generates a 1108-bp DNA fragment corresponding to the left end of RightZAP1.2. In presence of T4 DNA ligase, this fragment is almost completely shifted to form a 1530-bp

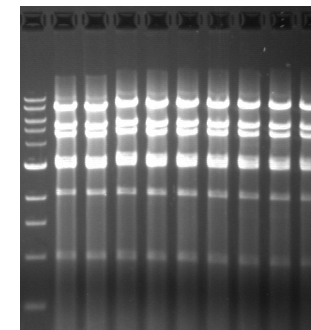
DNA fragment with the 430-bp long control left arm.



**Virus Recovery:**

The ligation mixture (2 µg DNA) was transfected into 293 cells (passage 38, 6-cm dishes) using the calcium-phosphate method. The cell monolayer was covered with agar 1 day after transfection and plaques were counted. The first plaques were visible 4 days after transfection. A total of 87 plaques

were counted 9 days after transfection. Nine virus clones were amplified, their genomes were purified and analyzed by restriction with *HindIII*. All clones presented the expected restriction pattern.



<sup>1</sup> New England Biolabs #R0547

<sup>2</sup> New England Biolabs #M0202

<sup>3</sup> New England Biolabs #323-2S