

## Product Information pAd1127-18

Research use only

Catalog No: QP-37 Lot No: 1002

Contents:

pAd1127-18 plasmid DNA, 10 μg,

1  $\mu g/\mu L$  in TE pH 7.5

Storage: -20°C

## **Features and Applications:**

pAd1127-18 is a plasmid designed for constructing recombinant oncolytic adenovirus vectors, in combination with the AdenoQuick2.0 plasmids (pAd1128, pAd1129, pAd1130, and their derivatives). It contains PacI and Swal sites flanking

the first 4007 base pairs from the Ad5 genome (including the left ITR and packaging signal, E1a/b regions, and the pIX coding region).

The plasmid is characterized by the presence of a 24-bp deletion in the E1a region, which deletes amino acids "L T CHEAGF" (121-128) from the conserved region CR2. That deletion renders the E1A protein unable to bind the retinoblastoma protein pRb. which in turn can bind to the transcription factor E2F. E2F becomes unable to activate the transcription of the adenovirus E2 region and other cellcycle genes. Therefore the  $\Delta 24$ adenovirus should be unable to replicate in normal cells. However it can still replicate in and lyse efficiently cancer cells with abnormal Rb control such as gliomas (Fueyo et al, 2000. Oncogene 19,2-12). The plasmid can be used to manipulate the E1a, E1b, and pIX coding regions. The sequences encompassing the kanamycin-resistance gene, the λ cos site, the adenovirus sequences are

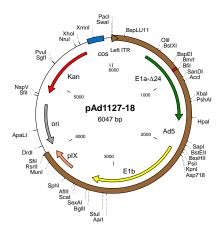
flanked by two Sfil restriction sites, which generate non-symmetrical sticky ends suitable for directional cloning.

## Selection:

prokaryotic - kanamycin 25 µg/mL

## Replication:

prokaryotic - pUC ori



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