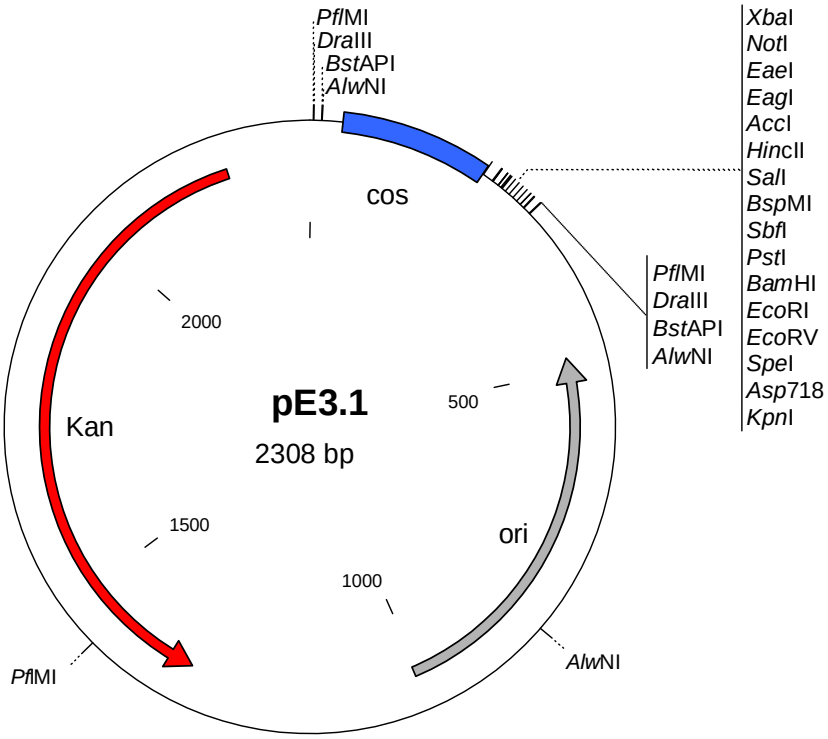
pE3.1

2,308 base pairs
Sequence available at www.od260.com

pE3.1 is a shuttle vector designed for inserting expression cassettes in place of the E3 region of the Ad5 genome, in combination with the pE1.2 and AdenoQuick13.1 plasmids. It contains a multiple cloning site (MCS) adjacent to a 178 bp-long λ cos site. Expression cassettes inserted into the MCS should contain a promoter, coding sequence and a polyA signal. The sequences encompassing the cos site and the MCS are flanked by two sets of restriction sites *Alw*NI, *Bst*API, *Dra*III and *Pfl*MI which generate non-symmetrical sticky ends useful for directional cloning. pE3.1 can also be used in combination with plasmids pAd328 and pE1.2 to construct conditionally replicative adenoviruses (CrAds) containing a heterologous promoter in front of the E1a TATA box, and a transgene in place of the E3 region. It can be used also in combination with plasmids pAd363 and pE1.2 to construct ΔE1/E3/E4 vectors with maximum 8.7 kb cargo capacity.

Feature	Coordinates	Source
Cos	40-217	Phage λ
origin of replication	1078-490	pUC19
Kan^r	2142-1327	*Tn903*



pE3.1 MCS

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                                    EcoRI
                                  BspMI   |
                EaeI    HindII    BamHI |   |
      SmaI)[1]  EagI     AccI|    PstI| |   |        SpeI      KpnI
 XbaI (AvaI)|  NotI    SalI||    SbfI| |   |   EcoRV   |Acc65I   |
    |     | |     |       |||       || |   |       |   |     |   |
    TCTAGACCCGGGAGCGGCCGCTGTCGACCTGCAGGATCCGAATTCGATATCACTAGTGGTACCC
222 --------+---------+---------+---------+---------+---------+----- 281
    AGATCTGGGCCCTCGCCGGCGACAGCTGGACGTCCTAGGCTTAAGCTATAGTGATCACCATGGG
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[1] Restriction sites between brackets are not unique.

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