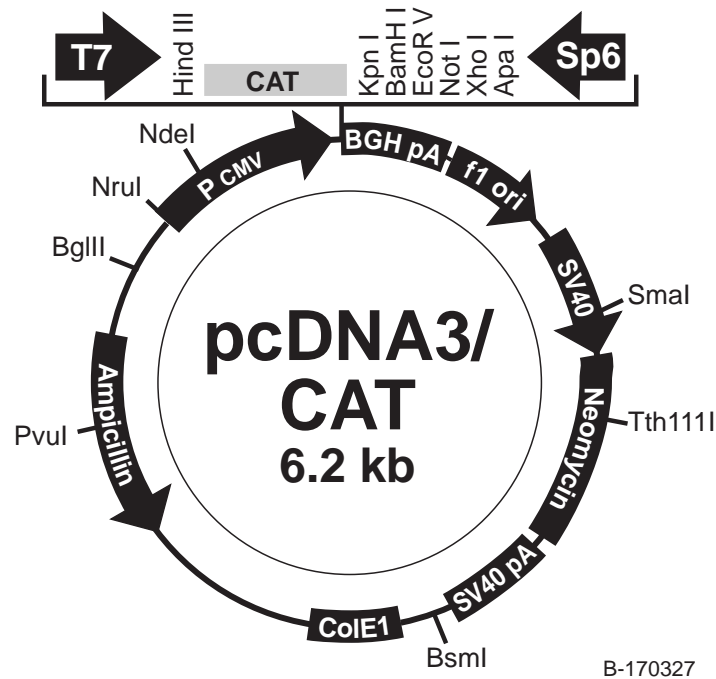


**Comments for pcDNA3/CAT:  
6229 nucleotides**

CMV promoter: bases 209-863  
 T7 promoter: bases 864-882  
 CAT gene: bases 927-1586  
 Sp6 promoter: bases 1786-1803  
 BGH poly A: bases 1806-2036  
 SV40 promoter: bases 2577-2902  
 SV40 origin of replication: bases 2771-2856  
 Neomycin ORF: bases 2938-3732  
 SV40 poly A: bases 3787-4155  
 ColE1 origin: bases 4315-5085  
 Ampicillin ORF: bases 5233-6093



The pcDNA3/CAT vector was constructed by inserting an 787 bp fragment coding for chloramphenicol acetyl transferase (CAT) gene into the *Hind* III site (at base pair 890 in pcDNA3). The first ATG in the fragment is the start codon for CAT. The A in this ATG is at position 39 relative to the *Hind* III insertion site. A Kozak consensus sequence is present for expression in mammalian cell lines. The A is located 3 basepairs upstream of the A in the ATG, and the G is located 3 basepairs downstream (underlined below). A stop codon is present 695 bp downstream of the *Hind* III insertion site.

The sequence of the 5' end of the CAT fragment between the *Hind* III site and the ATG is shown below.

1 *Hind* III 39  
 ...AAGCTTCGACGAGATTTTCAGGAGACTAAGGAAGCTAAA ATG GAG AAA AAA ATC.....