

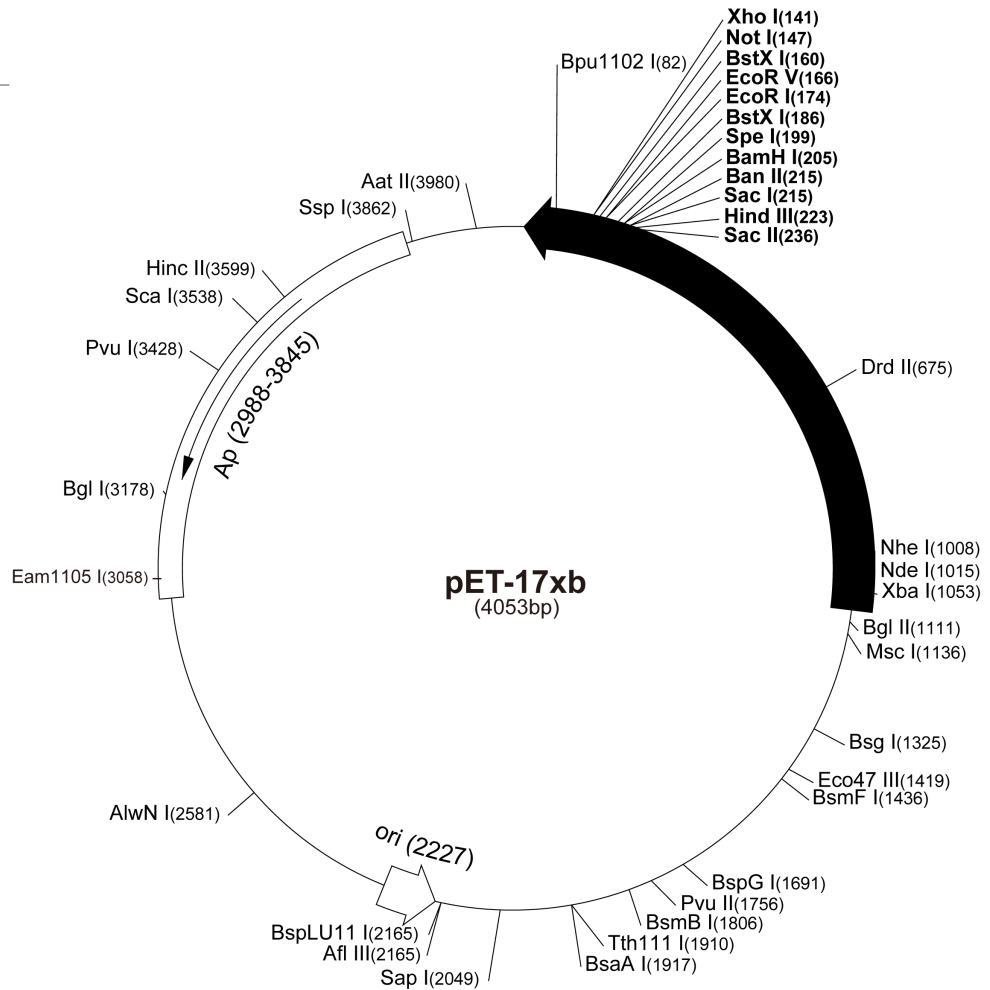
**pET-17xb Vector**

The pET-17xb vector (Cat. No. 69664-3) carries an N-terminal 260aa T7 gene 10 sequence (including the T7•Tag® region) followed by a region of useful cloning sites. Included in the multiple cloning region are dual *BstX* I sites, which allow efficient cloning using an asymmetric linker (1). Unique sites (except for the two *BstX* I sites) are shown on the circle map. Note that the sequence is numbered by the pBR322 convention, so the T7 expression region is reversed on the circular map. The cloning/expression region of the coding strand transcribed by T7 RNA polymerase is shown below.

1. Seed, B. (1987) *Nature* 329, 840.

**pET-17xb sequence landmarks**

T7 promoter	1080-1096
T7 transcription start	1079
T7 gene 10 coding sequence	237-1016
Multiple cloning sites ( <i>Sac</i> II - <i>Xho</i> I)	141-238
T7 terminator	28-74
pBR322 origin	2227
<i>bla</i> coding sequence	2988-3845



**pET-17xb cloning/expression region**

Bgl II
T7 promoter →
Xba I
rbs

AGATCTCGATCCCGCAAATTAATACGACTCACTATAGGGAGACCACAACGGTTTTCCCTCTAGAAATAATTTTGTAACTTTAAGAAGGAGA

Nde I Nhe I
T7•Tag
T7 gene 10 primer #69341-3 →
Sac II
Hind III
Sac I Bam HI Spe I

TATACATATGGCTAGCATGACTGGTGGACAGCAATGGGT...705bp...GAGTTGTAGAAGTCCGCACCTCACCCTGGTGGTGGCTGGTACCCGGATTCAAGCTTGGTACCGAGCTCGGATCCACTAGTA  
 MetAlaSerMetThrGlyGlyGlnGlnMetGly...235aa...GluValValGluValProHisLeuThrAlaGlyGlyAlaGlyThrAlaAspSerSerLeuValProSerSerAspProLeuVal

BstX I EcoR I EcoR V BstX I
Not I Xho I
Bpu1102 I

ACGGCCGCCAGTGTGCTGGAATCTGCAGATATCCATCACACTGGCGCCGCTCGAGCAGATCCGGCTGCTAACAAAGCCGAAAGGAAGCTGAGTTGGCTGCTGCCACCGCTGAGCAATAACTAGCATAA  
 ThrAlaAlaSerValLeuGluPheCysArgTyrProSerHisTrpArgProLeuGluGlnIleArgLeuLeuThrLysProGluArgLysLeuSerTrpLeuLeuProProLeuSerAsnAsnEnd

T7 terminator
T7 terminator primer #69337-3

CCCCTTGGGGCCCTCTAACGGGCTTGTAGGGGTTTTTTG

