


```

5110      5120      5130      5140      5150      5160      5170      5180      5190      5200
*         *         *         *         *         *         *         *         *         *
5101 catcacaanaaatcgacgctcaagtcaaggtggcgaaacccgacaggaactataaagataccaggcgtttcccctggaagctccctcgtgctctcctg 5200
pBR322ori
5210      5220      5230      5240      5250      5260      5270      5280      5290      5300
*         *         *         *         *         *         *         *         *         *
5201 ttccgacctgcccgttacggatacctgtccgcctttctccctcgggaagcgtggcgctttctcctatagctcacgctgtaggatctcagttcgggtga 5300
pBR322ori
5310      5320      5330      5340      5350      5360      5370      5380      5390      5400
*         *         *         *         *         *         *         *         *         *
5301 ggtcgttcgctccaagctgggctgtgtgcaacgccccctgacccgacccgctgccccttatccggtaactatcgtcttgatccaaccggtaaga 5400
pBR322ori
5410      5420      5430      5440      5450      5460      5470      5480      5490      5500
*         *         *         *         *         *         *         *         *         *
5401 cacgactatcgccactggcagcagccactggtaacaggattagcagagcgaggtatgtaggcggtgctacagagtcttgaagtggtgacctaacacg 5500
pBR322ori
5510      5520      5530      5540      5550      5560      5570      5580      5590      5600
*         *         *         *         *         *         *         *         *         *
5501 gotacactagaaggacagatatttggtatctgcgctctgctgaagccagttacctcggaaaaagagttggtagctcttgatccggcaaaccaaccacgc 5600
pBR322ori
5610      5620      5630      5640      5650      5660      5670      5680      5690      5700
*         *         *         *         *         *         *         *         *         *
5601 tggtagcgggtggtttttttgttgcaagcagcagattacgcgcagaaaaaaggatctcaagaagatccttgatcttttctacggggtctgacgctcag 5700
pBR322ori
5710      5720      5730      5740      5750      5760      5770      5780      5790      5800
*         *         *         *         *         *         *         *         *         *
5701 tggaaacgaaaactcacgttaagggttttggctcatgagattatcaaaaaggatcttcacctagatccttttaataaaaaatgaagtttaaatcaatct 5800
5810      5820      5830      5840      5850      5860      5870      5880      5890      5900
*         *         *         *         *         *         *         *         *         *
5801 aaagtatatatgagtaaaacttggtctgacagttaccaatgcttaactcagtgaggcacctatctcagcgatctgtctatttctgctcatccatagttgctg 5900
* W H K I L S A G I E A I Q R N R E D M T A Q
287
Ampicillin
5910      5920      5930      5940      5950      5960      5970      5980      5990      6000
*         *         *         *         *         *         *         *         *         *
5901 aatccccgctcgtgtagataactacgatacggggaggggttaccatctggccccagtgctgcaatgataccgcgagaccacgctcaccggctccagattta 6000
S G T T Y I V V I R S P K G D P G L A A I I G R S G R E G A G S K D
264
Ampicillin
6010      6020      6030      6040      6050      6060      6070      6080      6090      6100
*         *         *         *         *         *         *         *         *         *
6001 tcagcaataaacccagccagccggaaggccgagcgcagaagtggtcctgcaactttatccgcctccatccagctctattaatgttgccgggaagctagag 6100
A I F W G A P L A S R L L P G A V K D A E M W D I L Q Q R S A L T
230
Ampicillin
6110      6120      6130      6140      6150      6160      6170      6180      6190      6200
*         *         *         *         *         *         *         *         *         *
6101 taagtagttccgagtttaagtttgccgcaacggttggtgcccattgctacagccatcgtggtgtcacgctcgtcgtttggtatggcttcattcagctccgg 6200
L L E G T L L K R L T T A M A V P M T T D R E D N P I A E N L E P
197
Ampicillin
6210      6220      6230      6240      6250      6260      6270      6280      6290      6300
*         *         *         *         *         *         *         *         *         *
6201 ttccaacgatcaaggcgagttacatgatccccatggtgtgcaaaaaagcgggttagctccttcggctcctccgatcgttgcagaagtaagttggccgca 6300
E W R D L R T V H D G M N H L F A T L E K P G G I T T L L L N A A T
164
Ampicillin
6310      6320      6330      6340      6350      6360      6370      6380      6390      6400
*         *         *         *         *         *         *         *         *         *
6301 ggttatcaactcagttatggcagcactgcataattctcttactgtcatgccatccgtaagatgctttctgtgactggtgagtaactcaaaccaagtcac 6400
N D S M T I A A S C L E R V T M G D T L H K E T V P S Y E V L D N
130
Ampicillin
6410      6420      6430      6440      6450      6460      6470      6480      6490      6500
*         *         *         *         *         *         *         *         *         *

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