

表 4 最小潜在密码子识别模式下 tRNA 同工受体基因数与密码子使用频率的关系

Table 4 The relationship between copy number of tRNA isoacceptor gene and codon frequency under minimal potential codon recognition pattern

| 氨基酸 Amino acid | 反密码子 Anticodon | 密码子 Codon | tRNA 同工受体基因拷贝数 Copy number of tRNA isoacceptor gene | 密码子数 Codon number |
|-------------------|-------------------|--------------|--|----------------------|
| Ala | AGC | GCT-GCC | 15 | 430 895 |
| | CGC | GCG | 4 | 60 763 |
| | TGC | GCA | 36 | 240 980 |
| Arg | CCG | CGG | 3 | 54 497 |
| | ACG | CGT-CGC | 6 | 121 369 |
| | CCT | AGG | 5 | 152 281 |
| | TCG | CGA | 6 | 62 938 |
| | TCT | AGA | 7 | 176 349 |
| | GTT | AAT-AAC | 15 | 496 200 |
| | GTC | GAT-GAC | 24 | 570 540 |
| Asp | | | | |
| Cys | GCA | TGT-TGC | 10 | 211 534 |
| Gln | TTG | CAA | 7 | 224 251 |
| | CTG | CAG | 6 | 186 553 |
| Glu | TTC | GAA | 10 | 361 155 |
| | CTC | GAG | 14 | 336 945 |
| Gly | GCC | GGT-GGC | 16 | 346 528 |
| | TCC | GGA | 11 | 219 401 |
| | CCC | GGG | 6 | 154 650 |
| His | GTG | CAC-CAT | 11 | 269 356 |
| Ile | AAT | ATT-ATC | 20 | 432 379 |
| | TAT | ATA | 4 | 149 814 |
| | CAG | CTG | 4 | 152 481 |
| | CAA | TTG | 11 | 279 949 |
| | TAA | TTA | 6 | 129 848 |
| | TAG | CTA | 8 | 105 698 |
| Leu | AAG | CTT-CTC | 10 | 426 803 |
| | CTT | AAG | 17 | 362 046 |
| Lys | TTT | AAA | 14 | 309 542 |
| Met | CAT | ATG | 26 | 263 141 |
| Phe | GAA | TTT-TTC | 17 | 473 767 |
| Pro | AGG | CCT-CCC | 12 | 285 305 |
| | CGG | CCG | 2 | 59 352 |
| | TGG | CCA | 15 | 197 855 |
| Ser | AGA | TCT-TCC | 11 | 388 324 |
| | TGA | TCA | 9 | 220 245 |
| | CGA | TCG | 3 | 73 268 |
| | GCT | AGC-AGT | 10 | 299 610 |
| Thr | AGT | ACT-ACC | 9 | 308 733 |
| | CGT | ACG | 2 | 54 088 |
| | TGT | ACA | 9 | 178 685 |
| Trp | CCA | TGG | 9 | 144 820 |
| Tyr | GTA | TAT-TAC | 10 | 309 437 |
| Val | AAC | GTT | 13 | 275 844 |
| | CAC | GTG | 7 | 206 903 |
| | TAC | GTA | 5 | 108 402 |
| | GAC | GTC | 1 | 126 708 |