Simulated sequences, with correlation between positions 1 and 10, but no correlation with position 4

50 sequences, 2 families

ATGTTCGGCA
TCGTTCGGCA
TTATCCAGCA
TTATTCAGCC
TTGTCAAACA
TTGTATATCA
TTTTAAGACA
TTTTACGACA
TAAATAAGCA
TAGTTATGCA
TCGGTAATCA
TCCTTAAGCA
TTGGGAAGCA
TTCGCAGGCA
TGCTAAGTCA
TGCTAGTTTA
TTCTTGGTTA
TACTTTCTTA
TACTTTAACA
TACTTATTGA
TCGTTGTCCA
GCGTTGTTCG
TCGGGGTGCA
TGTTGAATGA
TCTGGCAGTA
TATTTCTAAA
AATTTCATAC
ACATCGAAGA
CACGTTAGCT
GTTGTAAACA
GTGGTAATCG
GCGGAAAACG
TGGCTAAACA
GAGCTAAACG
GGTCTATTCG
GACGTCGACG
GTCGTATAAG
ACGGTAATTC
GATTCCAACG
GTGTCGAGCG
GGCTCCAGAG
GGTTAGAATG
GGGGCCATTG
GTCTTATCTG
GCCTCAACTG
GTTTCTTGTG
GTATGAGGAG
GGACGAAGAG
GTGTTAGTAG
GTTTAGGTAG

7 6 5 4 3 2 1 0