

R version 4.4.0 (2024-04-24) -- "Puppy Cup"  
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Platform: aarch64-apple-darwin20

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Natural language support but running in an English locale

R is a collaborative project with many contributors.  
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Type 'demo()' for some demos, 'help()' for on-line help, or  
'help.start()' for an HTML browser interface to help.  
Type 'q()' to quit R.

[R.app GUI 1.80 (8376) aarch64-apple-darwin20]

[History restored from /Users/alperkaragol/.Rapp.history]

```
> setwd("/Users/alperkaragol/Desktop/Genomics/Glutamate_isoformsData/TajimaD/EAA1")
>
> # Function to read alignment from a text file
> read_alignment <- function(file) {
+   # Read the file line by line
+   lines <- readLines(file)
+
+   # Split each line into individual characters to form the alignment matrix
+   alignment <- do.call(rbind, strsplit(lines, ""))
+
+   return(alignment)
+ }
>
> # Function to compute site frequency spectrum (SFS)
> compute_SFS <- function(alignment) {
+   # Number of sequences
+   num_sequences <- nrow(alignment)
+
+   # Initialize an empty vector to store counts for each frequency
+   sfs <- numeric(num_sequences - 1)
+
+   # Loop through each column in the alignment
+   for (i in 1:ncol(alignment)) {
+     # Count the number of unique characters in the column
+     counts <- table(alignment[, i])
+
+     # Remove gaps "-" from the counts
+     counts <- counts[!names(counts) %in% "-"]
+
+     # Increment the count for each frequency in the SFS
+     for (count in counts) {
+       if (count > 1 && count <= num_sequences) {
+         sfs[count - 1] <- sfs[count - 1] + 1
+       }
+     }
+   }
+
+   return(sfs)
+ }
>
> # Path to the alignment file
> file <- "alignment.txt"
>
> # Read the alignment from the file
> alignment <- read_alignment(file)
> print(alignment)
      [,1] [,2] [,3] [,4] [,5] [,6] [,7] [,8] [,9] [,10] [,11] [,12] [,13] [,14] [,15] [,16] [,17] [,18] [,19] [,20]
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[6,]	"C"	"T"	"A"	"G"	"T"	"C"	"C"	"C"	"G"	"G"	"T"	"T"	"T"	"T"	"G"
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[4,]	"G"	"A"	"G"	"C"	"A"	"A"	"A"	"A"	"C"	"A"	"A"	"A"	"G"	"C"	"C"
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[6,]	"G"	"G"	"T"	"T"	"T"	"C"	"C"	"A"	"T"	"T"	"C"	"C"	"C"	"C"	"A"
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[4,]	"C"	"T"	"C"	"C"	"T"	"C"	"C"	"T"	"T"	"T"	"C"	"C"	"C"	"G"	"G"

[5,] "-" "-" "-" "-" "-" "-" "-" "-" "-" "-" "-" "-" "-" "-" "-"  
[6,] "C" "T" "C" "C" "T" "C" "C" "T" "T" "T" "C" "C" "C" "G" "G"  
[,364] [,365] [,366] [,367] [,368] [,369] [,370] [,371] [,372] [,373] [,374] [,375] [,376] [,377] [,378]  
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[2,] "G" "C" "A" "C" "A" "G" "A" "C" "T" "C" "C" "T" "C" "C" "C"  
[3,] "G" "C" "A" "C" "A" "G" "A" "C" "T" "C" "C" "T" "C" "C" "C"  
[4,] "G" "C" "A" "C" "A" "G" "A" "C" "T" "C" "C" "T" "C" "C" "C"  
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[,379] [,380] [,381] [,382] [,383] [,384] [,385] [,386] [,387] [,388] [,389] [,390] [,391] [,392] [,393]  
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[2,] "C" "T" "T" "T" "T" "C" "T" "T" "A" "A" "G" "T" "T" "G" "C"  
[3,] "C" "T" "T" "T" "T" "C" "T" "T" "A" "A" "G" "T" "T" "G" "C"  
[4,] "C" "T" "T" "T" "T" "C" "T" "T" "A" "A" "G" "T" "T" "G" "C"  
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[6,] "C" "T" "T" "T" "T" "C" "T" "T" "A" "A" "G" "T" "T" "G" "C"  
[,394] [,395] [,396] [,397] [,398] [,399] [,400] [,401] [,402] [,403] [,404] [,405] [,406] [,407] [,408]  
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[2,] "C" "C" "T" "G" "A" "T" "A" "G" "T" "A" "A" "C" "T" "T" "G"  
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[4,] "C" "C" "T" "G" "A" "T" "A" "G" "T" "A" "A" "C" "T" "T" "G"  
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[6,] "C" "C" "T" "G" "A" "T" "A" "G" "T" "A" "A" "C" "T" "T" "G"  
[,409] [,410] [,411] [,412] [,413] [,414] [,415] [,416] [,417] [,418] [,419] [,420] [,421] [,422] [,423]  
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[,424] [,425] [,426] [,427] [,428] [,429] [,430] [,431] [,432] [,433] [,434] [,435] [,436] [,437] [,438]  
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[3,] "T" "G" "C" "A" "C" "A" "C" "T" "G" "T" "C" "A" "G" "G"  
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[,439] [,440] [,441] [,442] [,443] [,444] [,445] [,446] [,447] [,448] [,449] [,450] [,451] [,452] [,453]  
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[,454] [,455] [,456] [,457] [,458] [,459] [,460] [,461] [,462] [,463] [,464] [,465] [,466] [,467] [,468]  
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[2,] "A" "C" "G" "C" "G" "C" "G" "C" "T" "G" "C" "G" "G" "A" "T"  
[3,] "A" "C" "G" "C" "G" "C" "G" "C" "T" "G" "C" "G" "G" "A" "T"  
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[2,] "T" "G" "T" "T" "G" "C" "T" "C" "C" "G" "T" "T" "G" "T" "A"  
[3,] "T" "G" "T" "T" "G" "C" "T" "C" "C" "G" "T" "T" "G" "T" "A"  
[4,] "T" "G" "T" "T" "G" "C" "T" "C" "C" "G" "T" "T" "G" "T" "A"  
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[,484] [,485] [,486] [,487] [,488] [,489] [,490] [,491] [,492] [,493] [,494] [,495] [,496] [,497] [,498]  
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[2,] "C" "C" "T" "G" "C" "T" "G" "G" "G" "G" "A" "A" "T" "T" "C"  
[3,] "C" "C" "T" "G" "C" "T" "G" "G" "G" "G" "A" "A" "T" "T" "C"  
[4,] "C" "C" "T" "G" "C" "T" "G" "G" "G" "G" "A" "A" "T" "T" "C"  
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[6,] "A" "C" "C" "T" "C" "G" "T" "T" "A" "C" "T" "G" "C" "T" "T"  
[,514] [,515] [,516] [,517] [,518] [,519] [,520] [,521] [,522] [,523] [,524] [,525] [,526] [,527] [,528]  
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[2,] "G" "A" "T" "A" "T" "C" "T" "C" "C" "A" "C" "C" "C" "C"  
[3,] "G" "A" "T" "A" "T" "C" "T" "C" "C" "A" "C" "C" "C" "C"

[4,]	"G"	"A"	"T"	"A"	"T"	"C"	"T"	"T"	"C"	"C"	"A"	"C"	"C"	"C"	"C"
[5,]	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
[6,]	"G"	"A"	"T"	"A"	"T"	"C"	"T"	"T"	"C"	"C"	"A"	"C"	"C"	"C"	"C"
	[,529]	[,530]	[,531]	[,532]	[,533]	[,534]	[,535]	[,536]	[,537]	[,538]	[,539]	[,540]	[,541]	[,542]	[,543]
[1,]	"T"	"T"	"A"	"C"	"A"	"A"	"A"	"A"	"T"	"C"	"A"	"G"	"A"	"A"	"_"
[2,]	"T"	"T"	"A"	"C"	"A"	"A"	"A"	"A"	"T"	"C"	"A"	"G"	"A"	"A"	"_"
[3,]	"T"	"T"	"A"	"C"	"A"	"A"	"A"	"A"	"T"	"C"	"A"	"G"	"A"	"A"	"_"
[4,]	"T"	"T"	"A"	"C"	"A"	"A"	"A"	"A"	"T"	"C"	"A"	"G"	"A"	"A"	"A"
[5,]	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"G"	"A"	"A"
[6,]	"T"	"T"	"A"	"C"	"A"	"A"	"A"	"A"	"T"	"C"	"A"	"G"	"A"	"A"	"_"
	[,544]	[,545]	[,546]	[,547]	[,548]	[,549]	[,550]	[,551]	[,552]	[,553]	[,554]	[,555]	[,556]	[,557]	[,558]
[1,]	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
[2,]	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
[3,]	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
[4,]	"A"	"G"	"G"	"C"	"A"	"A"	"A"	"C"	"T"	"G"	"T"	"T"	"A"	"A"	"G"
[5,]	"A"	"G"	"A"	"A"	"A"	"A"	"A"	"C"	"T"	"G"	"G"	"G"	"G"	"G"	"G"
[6,]	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
	[,559]	[,560]	[,561]	[,562]	[,563]	[,564]	[,565]	[,566]	[,567]	[,568]	[,569]	[,570]	[,571]	[,572]	[,573]
[1,]	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
[2,]	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
[3,]	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
[4,]	"_"	"_"	"T"	"C"	"T"	"T"	"T"	"T"	"T"	"T"	"T"	"T"	"T"	"C"	"C"
[5,]	"A"	"A"	"A"	"A"	"A"	"G"	"A"	"T"	"C"	"T"	"C"	"T"	"G"	"A"	"A"
[6,]	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
	[,574]	[,575]	[,576]	[,577]	[,578]	[,579]	[,580]	[,581]	[,582]	[,583]	[,584]	[,585]	[,586]	[,587]	[,588]
[1,]	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
[2,]	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
[3,]	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
[4,]	"T"	"G"	"C"	"A"	"C"	"T"	"G"	"G"	"G"	"A"	"T"	"T"	"G"	"C"	"A"
[5,]	"T"	"C"	"C"	"T"	"T"	"T"	"G"	"G"	"G"	"A"	"T"	"T"	"T"	"A"	"A"
[6,]	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
	[,589]	[,590]	[,591]	[,592]	[,593]	[,594]	[,595]	[,596]	[,597]	[,598]	[,599]	[,600]	[,601]	[,602]	[,603]
[1,]	"_"	"_"	"A"	"A"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
[2,]	"_"	"_"	"A"	"A"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
[3,]	"_"	"_"	"A"	"A"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
[4,]	"A"	"G"	"A"	"A"	"G"	"T"	"C"	"A"	"T"	"T"	"T"	"G"	"C"	"G"	"A"
[5,]	"T"	"G"	"G"	"A"	"G"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
[6,]	"_"	"_"	"A"	"A"	"G"	"T"	"C"	"A"	"T"	"T"	"T"	"G"	"C"	"G"	"A"
	[,604]	[,605]	[,606]	[,607]	[,608]	[,609]	[,610]	[,611]	[,612]	[,613]	[,614]	[,615]	[,616]	[,617]	[,618]
[1,]	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
[2,]	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
[3,]	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
[4,]	"G"	"G"	"A"	"G"	"T"	"C"	"C"	"T"	"T"	"G"	"G"	"T"	"T"	"T"	"T"
[5,]	"_"	"G"	"A"	"A"	"A"	"G"	"_"	"G"	"T"	"G"	"C"	"A"	"A"	"G"	"T"
[6,]	"G"	"G"	"A"	"G"	"T"	"C"	"C"	"T"	"T"	"G"	"T"	"T"	"T"	"T"	"T"
	[,619]	[,620]	[,621]	[,622]	[,623]	[,624]	[,625]	[,626]	[,627]	[,628]	[,629]	[,630]	[,631]	[,632]	[,633]
[1,]	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
[2,]	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
[3,]	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
[4,]	"C"	"C"	"A"	"G"	"T"	"A"	"C"	"C"	"T"	"G"	"C"	"C"	"C"	"C"	"C"
[5,]	"C"	"C"	"A"	"A"	"G"	"C"	"A"	"G"	"C"	"T"	"C"	"T"	"C"	"T"	"A"
[6,]	"C"	"C"	"A"	"G"	"T"	"T"	"A"	"C"	"C"	"T"	"C"	"C"	"C"	"C"	"C"
	[,634]	[,635]	[,636]	[,637]	[,638]	[,639]	[,640]	[,641]	[,642]	[,643]	[,644]	[,645]	[,646]	[,647]	[,648]
[1,]	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
[2,]	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
[3,]	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
[4,]	"A"	"C"	"A"	"G"	"G"	"C"	"G"	"C"	"A"	"C"	"A"	"C"	"G"	"C"	"T"
[5,]	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"G"	"A"	"A"	"A"	"G"	"A"	"G"
[6,]	"A"	"C"	"A"	"G"	"G"	"C"	"G"	"C"	"A"	"C"	"A"	"G"	"G"	"C"	"T"
	[,649]	[,650]	[,651]	[,652]	[,653]	[,654]	[,655]	[,656]	[,657]	[,658]	[,659]	[,660]	[,661]	[,662]	[,663]
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[2,]	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
[3,]	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
[4,]	"G"	"G"	"C"	"T"	"G"	"C"	"T"	"T"	"G"	"C"	"G"	"T"	"T"	"G"	"G"
[5,]	"G"	"A"	"G"	"A"	"C"	"T"	"C"	"C"	"A"	"G"	"C"	"T"	"A"	"C"	"C"
[6,]	"G"	"G"	"C"	"T"	"G"	"C"	"T"	"T"	"G"	"C"	"G"	"T"	"T"	"G"	"G"
	[,664]	[,665]	[,666]	[,667]	[,668]	[,669]	[,670]	[,671]	[,672]	[,673]	[,674]	[,675]	[,676]	[,677]	[,678]
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[2,]	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
[3,]	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
[4,]	"C"	"A"	"G"	"C"	"G"	"A"	"C"	"A"	"C"	"A"	"C"	"A"	"T"	"C"	"C"
[5,]	"C"	"T"	"G"	"T"	"G"	"C"	"A"	"G"	"G"	"C"	"T"	"T"	"T"	"G"	"A"
[6,]	"C"	"A"	"G"	"C"	"G"	"A"	"T"	"A"	"C"	"A"	"C"	"A"	"T"	"C"	"C"
	[,679]	[,680]	[,681]	[,682]	[,683]	[,684]	[,685]	[,686]	[,687]	[,688]	[,689]	[,690]	[,691]	[,692]	[,693]
[1,]	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"
[2,]	"_"	"_"	"G"	"T"	"T"	"G"	"T"	"G"	"T"	"T"	"T"	"T"	"C"	"T"	"A"

[3,]	"_"	"_"	"G"	"T"	"T"	"C"	"T"	"G"	"T"	"T"	"T"	"T"	"C"	"T"	"A"
[4,]	"C"	"T"	"G"	"C"	"T"	"G"	"T"	"G"	"G"	"T"	"T"	"T"	"C"	"T"	"A"
[5,]	"A"	"G"	"G"	"T"	"T"	"G"	"T"	"G"	"T"	"T"	"T"	"T"	"C"	"T"	"A"
[6,]	"A"	"T"	"G"	"T"	"T"	"C"	"T"	"G"	"T"	"T"	"T"	"T"	"C"	"T"	"A"
[1,]	[,694]	[,695]	[,696]	[,697]	[,698]	[,699]	[,700]	[,701]	[,702]	[,703]	[,704]	[,705]	[,706]	[,707]	[,708]
[2,]	"A"	"T"	"A"	"C"	"C"	"A"	"A"	"A"	"G"	"A"	"G"	"G"	"A"	"G"	"G"
[3,]	"A"	"T"	"A"	"C"	"C"	"A"	"A"	"A"	"G"	"A"	"G"	"G"	"A"	"G"	"G"
[4,]	"A"	"C"	"A"	"C"	"C"	"A"	"A"	"A"	"G"	"A"	"G"	"G"	"A"	"G"	"G"
[5,]	"A"	"T"	"A"	"C"	"C"	"A"	"A"	"A"	"G"	"A"	"G"	"G"	"A"	"G"	"G"
[6,]	"A"	"T"	"A"	"C"	"C"	"A"	"A"	"A"	"G"	"A"	"G"	"G"	"A"	"G"	"G"
[1,]	[,709]	[,710]	[,711]	[,712]	[,713]	[,714]	[,715]	[,716]	[,717]	[,718]	[,719]	[,720]	[,721]	[,722]	[,723]
[2,]	"T"	"T"	"T"	"G"	"G"	"C"	"T"	"T"	"T"	"C"	"T"	"G"	"T"	"G"	"G"
[3,]	"T"	"T"	"T"	"G"	"G"	"C"	"T"	"T"	"T"	"C"	"T"	"G"	"T"	"G"	"G"
[4,]	"T"	"T"	"T"	"G"	"G"	"C"	"T"	"T"	"T"	"C"	"T"	"G"	"T"	"G"	"G"
[5,]	"T"	"T"	"T"	"G"	"G"	"C"	"T"	"T"	"T"	"C"	"T"	"G"	"T"	"G"	"G"
[6,]	"T"	"T"	"T"	"G"	"G"	"C"	"T"	"T"	"T"	"C"	"T"	"G"	"T"	"G"	"G"
[1,]	[,724]	[,725]	[,726]	[,727]	[,728]	[,729]	[,730]	[,731]	[,732]	[,733]	[,734]	[,735]	[,736]	[,737]	[,738]
[2,]	"G"	"T"	"G"	"A"	"T"	"T"	"C"	"C"	"C"	"A"	"G"	"A"	"C"	"A"	"C"
[3,]	"G"	"T"	"G"	"A"	"T"	"T"	"C"	"C"	"C"	"A"	"G"	"A"	"C"	"A"	"C"
[4,]	"G"	"T"	"G"	"A"	"T"	"T"	"C"	"C"	"C"	"A"	"G"	"A"	"C"	"A"	"C"
[5,]	"G"	"T"	"G"	"A"	"T"	"T"	"C"	"C"	"C"	"A"	"G"	"A"	"C"	"A"	"C"
[6,]	"G"	"T"	"G"	"A"	"T"	"T"	"C"	"C"	"C"	"A"	"G"	"A"	"C"	"A"	"C"
[1,]	[,739]	[,740]	[,741]	[,742]	[,743]	[,744]	[,745]	[,746]	[,747]	[,748]	[,749]	[,750]	[,751]	[,752]	[,753]
[2,]	"T"	"G"	"A"	"A"	"G"	"T"	"G"	"C"	"A"	"A"	"A"	"G"	"A"	"A"	"G"
[3,]	"T"	"G"	"A"	"A"	"G"	"T"	"G"	"C"	"A"	"A"	"A"	"G"	"A"	"A"	"G"
[4,]	"T"	"G"	"A"	"A"	"G"	"T"	"G"	"C"	"A"	"A"	"A"	"G"	"A"	"A"	"G"
[5,]	"T"	"G"	"A"	"A"	"G"	"T"	"G"	"C"	"A"	"A"	"A"	"G"	"A"	"A"	"G"
[6,]	"T"	"G"	"A"	"A"	"G"	"T"	"G"	"C"	"A"	"A"	"A"	"G"	"A"	"A"	"G"
[1,]	[,754]	[,755]	[,756]	[,757]	[,758]	[,759]	[,760]	[,761]	[,762]	[,763]	[,764]	[,765]	[,766]	[,767]	[,768]
[2,]	"A"	"G"	"A"	"C"	"C"	"C"	"T"	"C"	"C"	"T"	"A"	"G"	"A"	"A"	"A"
[3,]	"A"	"G"	"A"	"C"	"C"	"C"	"T"	"C"	"C"	"T"	"A"	"G"	"A"	"A"	"A"
[4,]	"A"	"G"	"A"	"C"	"C"	"C"	"T"	"C"	"C"	"T"	"A"	"G"	"A"	"A"	"A"
[5,]	"A"	"G"	"A"	"C"	"C"	"C"	"T"	"C"	"C"	"T"	"A"	"G"	"A"	"A"	"A"
[6,]	"A"	"G"	"A"	"C"	"C"	"C"	"T"	"C"	"C"	"T"	"A"	"G"	"A"	"A"	"A"
[1,]	[,769]	[,770]	[,771]	[,772]	[,773]	[,774]	[,775]	[,776]	[,777]	[,778]	[,779]	[,780]	[,781]	[,782]	[,783]
[2,]	"A"	"G"	"T"	"A"	"A"	"A"	"A"	"T"	"A"	"T"	"G"	"A"	"C"	"T"	"A"
[3,]	"A"	"G"	"T"	"A"	"A"	"A"	"A"	"T"	"A"	"T"	"G"	"A"	"C"	"T"	"A"
[4,]	"A"	"G"	"T"	"A"	"A"	"A"	"A"	"T"	"A"	"T"	"G"	"A"	"C"	"T"	"A"
[5,]	"A"	"G"	"T"	"A"	"A"	"A"	"A"	"T"	"A"	"T"	"G"	"A"	"C"	"T"	"A"
[6,]	"A"	"G"	"T"	"A"	"A"	"A"	"A"	"T"	"A"	"T"	"G"	"A"	"C"	"T"	"A"
[1,]	[,784]	[,785]	[,786]	[,787]	[,788]	[,789]	[,790]	[,791]	[,792]	[,793]	[,794]	[,795]	[,796]	[,797]	[,798]
[2,]	"A"	"A"	"A"	"G"	"C"	"A"	"A"	"T"	"G"	"G"	"A"	"G"	"A"	"A"	"G"
[3,]	"A"	"A"	"A"	"G"	"C"	"A"	"A"	"T"	"G"	"G"	"A"	"G"	"A"	"A"	"G"
[4,]	"A"	"A"	"A"	"G"	"C"	"A"	"A"	"T"	"G"	"G"	"A"	"G"	"A"	"A"	"G"
[5,]	"A"	"A"	"A"	"G"	"C"	"A"	"A"	"T"	"G"	"G"	"A"	"G"	"A"	"A"	"G"
[6,]	"A"	"A"	"A"	"G"	"C"	"A"	"A"	"T"	"G"	"G"	"A"	"G"	"A"	"A"	"G"
[1,]	[,799]	[,800]	[,801]	[,802]	[,803]	[,804]	[,805]	[,806]	[,807]	[,808]	[,809]	[,810]	[,811]	[,812]	[,813]
[2,]	"A"	"G"	"C"	"C"	"C"	"A"	"A"	"G"	"A"	"T"	"G"	"G"	"G"	"G"	"G"
[3,]	"A"	"G"	"C"	"C"	"C"	"A"	"A"	"G"	"A"	"T"	"G"	"G"	"G"	"G"	"G"
[4,]	"A"	"G"	"C"	"C"	"C"	"A"	"A"	"G"	"A"	"T"	"G"	"G"	"G"	"G"	"G"
[5,]	"A"	"G"	"C"	"C"	"C"	"A"	"A"	"G"	"A"	"T"	"G"	"G"	"G"	"G"	"G"
[6,]	"A"	"G"	"C"	"C"	"C"	"A"	"A"	"G"	"A"	"T"	"G"	"G"	"G"	"G"	"G"
[1,]	[,814]	[,815]	[,816]	[,817]	[,818]	[,819]	[,820]	[,821]	[,822]	[,823]	[,824]	[,825]	[,826]	[,827]	[,828]
[2,]	"G"	"C"	"A"	"G"	"G"	"A"	"T"	"G"	"G"	"A"	"G"	"A"	"G"	"A"	"T"
[3,]	"G"	"C"	"A"	"G"	"G"	"A"	"T"	"G"	"G"	"A"	"G"	"A"	"G"	"A"	"T"
[4,]	"G"	"C"	"A"	"G"	"G"	"A"	"T"	"G"	"G"	"A"	"G"	"A"	"G"	"A"	"T"
[5,]	"G"	"C"	"A"	"G"	"G"	"A"	"T"	"G"	"G"	"A"	"G"	"A"	"G"	"A"	"T"
[6,]	"G"	"C"	"A"	"G"	"G"	"A"	"T"	"G"	"G"	"A"	"G"	"A"	"G"	"A"	"T"
[1,]	[,829]	[,830]	[,831]	[,832]	[,833]	[,834]	[,835]	[,836]	[,837]	[,838]	[,839]	[,840]	[,841]	[,842]	[,843]
[2,]	"T"	"C"	"C"	"A"	"G"	"C"	"A"	"G"	"G"	"G"	"A"	"G"	"T"	"C"	"C"
[3,]	"T"	"C"	"C"	"A"	"G"	"C"	"A"	"G"	"G"	"G"	"A"	"G"	"T"	"C"	"C"
[4,]	"T"	"C"	"C"	"A"	"G"	"C"	"A"	"G"	"G"	"G"	"A"	"G"	"T"	"C"	"C"
[5,]	"T"	"C"	"C"	"A"	"G"	"C"	"A"	"G"	"G"	"G"	"A"	"G"	"T"	"C"	"C"
[6,]	"T"	"C"	"C"	"A"	"G"	"C"	"A"	"G"	"G"	"G"	"A"	"G"	"T"	"C"	"C"
[1,]	[,844]	[,845]	[,846]	[,847]	[,848]	[,849]	[,850]	[,851]	[,852]	[,853]	[,854]	[,855]	[,856]	[,857]	[,858]
[2,]	"G"	"T"	"A"	"A"	"A"	"C"	"G"	"C"	"A"	"C"	"A"	"C"	"T"	"T"	"T"

[2,]	"G"	"T"	"A"	"A"	"A"	"C"	"G"	"C"	"A"	"C"	"A"	"C"	"T"	"T"	"T"
[3,]	"G"	"T"	"A"	"A"	"A"	"C"	"G"	"C"	"A"	"C"	"A"	"C"	"T"	"T"	"T"
[4,]	"G"	"T"	"A"	"A"	"A"	"C"	"G"	"C"	"A"	"C"	"A"	"C"	"T"	"T"	"T"
[5,]	"G"	"T"	"A"	"A"	"A"	"C"	"G"	"C"	"A"	"C"	"A"	"C"	"T"	"T"	"T"
[6,]	"G"	"T"	"A"	"A"	"A"	"C"	"G"	"C"	"A"	"C"	"A"	"C"	"T"	"T"	"T"
	[,859]	[,860]	[,861]	[,862]	[,863]	[,864]	[,865]	[,866]	[,867]	[,868]	[,869]	[,870]	[,871]	[,872]	[,873]
[1,]	"T"	"G"	"G"	"C"	"C"	"A"	"A"	"G"	"A"	"A"	"G"	"A"	"A"	"A"	"G"
[2,]	"T"	"G"	"G"	"C"	"C"	"A"	"A"	"G"	"A"	"A"	"G"	"A"	"A"	"A"	"G"
[3,]	"T"	"G"	"G"	"C"	"C"	"A"	"A"	"G"	"A"	"A"	"G"	"A"	"A"	"A"	"G"
[4,]	"T"	"G"	"G"	"C"	"C"	"A"	"A"	"G"	"A"	"A"	"G"	"A"	"A"	"A"	"G"
[5,]	"T"	"G"	"G"	"C"	"C"	"A"	"A"	"G"	"A"	"A"	"G"	"A"	"A"	"A"	"G"
[6,]	"T"	"G"	"G"	"C"	"C"	"A"	"A"	"G"	"A"	"A"	"G"	"A"	"A"	"A"	"G"
	[,874]	[,875]	[,876]	[,877]	[,878]	[,879]	[,880]	[,881]	[,882]	[,883]	[,884]	[,885]	[,886]	[,887]	[,888]
[1,]	"T"	"G"	"C"	"A"	"G"	"A"	"A"	"C"	"A"	"T"	"T"	"A"	"C"	"A"	"A"
[2,]	"T"	"G"	"C"	"A"	"G"	"A"	"A"	"C"	"A"	"T"	"T"	"A"	"C"	"A"	"A"
[3,]	"T"	"G"	"C"	"A"	"G"	"A"	"A"	"C"	"A"	"T"	"T"	"A"	"C"	"A"	"A"
[4,]	"T"	"G"	"C"	"A"	"G"	"A"	"A"	"C"	"A"	"T"	"T"	"A"	"C"	"A"	"A"
[5,]	"T"	"G"	"C"	"A"	"G"	"A"	"A"	"C"	"A"	"T"	"T"	"A"	"C"	"A"	"A"
[6,]	"T"	"G"	"C"	"A"	"G"	"A"	"A"	"C"	"A"	"T"	"T"	"A"	"C"	"A"	"A"
	[,889]	[,890]	[,891]	[,892]	[,893]	[,894]	[,895]	[,896]	[,897]	[,898]	[,899]	[,900]	[,901]	[,902]	[,903]
[1,]	"A"	"G"	"G"	"A"	"G"	"G"	"A"	"T"	"G"	"T"	"T"	"A"	"A"	"A"	"A"
[2,]	"A"	"G"	"G"	"A"	"G"	"G"	"A"	"T"	"G"	"T"	"T"	"A"	"A"	"A"	"A"
[3,]	"A"	"G"	"G"	"A"	"G"	"G"	"A"	"T"	"G"	"T"	"T"	"A"	"A"	"A"	"A"
[4,]	"A"	"G"	"G"	"A"	"G"	"G"	"A"	"T"	"G"	"T"	"T"	"A"	"A"	"A"	"A"
[5,]	"A"	"G"	"G"	"A"	"G"	"G"	"A"	"T"	"G"	"T"	"T"	"A"	"A"	"A"	"A"
[6,]	"A"	"G"	"G"	"A"	"G"	"G"	"A"	"T"	"G"	"T"	"T"	"A"	"A"	"A"	"A"
	[,904]	[,905]	[,906]	[,907]	[,908]	[,909]	[,910]	[,911]	[,912]	[,913]	[,914]	[,915]	[,916]	[,917]	[,918]
[1,]	"G"	"T"	"T"	"A"	"C"	"C"	"T"	"G"	"T"	"T"	"T"	"C"	"G"	"G"	"A"
[2,]	"G"	"T"	"T"	"A"	"C"	"C"	"T"	"G"	"T"	"T"	"T"	"C"	"G"	"G"	"A"
[3,]	"G"	"T"	"T"	"A"	"C"	"C"	"T"	"G"	"T"	"T"	"T"	"C"	"G"	"G"	"A"
[4,]	"G"	"T"	"T"	"A"	"C"	"C"	"T"	"G"	"T"	"T"	"T"	"C"	"G"	"G"	"A"
[5,]	"G"	"T"	"T"	"A"	"C"	"C"	"T"	"G"	"T"	"T"	"T"	"C"	"G"	"G"	"A"
[6,]	"G"	"T"	"T"	"A"	"C"	"C"	"T"	"G"	"T"	"T"	"T"	"C"	"G"	"G"	"A"
	[,919]	[,920]	[,921]	[,922]	[,923]	[,924]	[,925]	[,926]	[,927]	[,928]	[,929]	[,930]	[,931]	[,932]	[,933]
[1,]	"A"	"T"	"G"	"C"	"T"	"T"	"T"	"T"	"G"	"T"	"G"	"C"	"T"	"G"	"C"
[2,]	"A"	"T"	"G"	"C"	"T"	"T"	"T"	"T"	"G"	"T"	"G"	"C"	"T"	"G"	"C"
[3,]	"A"	"T"	"G"	"C"	"T"	"T"	"T"	"T"	"G"	"T"	"G"	"C"	"T"	"G"	"C"
[4,]	"A"	"T"	"G"	"C"	"T"	"T"	"T"	"T"	"G"	"T"	"G"	"C"	"T"	"G"	"C"
[5,]	"A"	"T"	"G"	"C"	"T"	"T"	"T"	"T"	"G"	"T"	"G"	"C"	"T"	"G"	"C"
[6,]	"A"	"T"	"G"	"C"	"T"	"T"	"T"	"T"	"G"	"T"	"G"	"C"	"T"	"G"	"C"
	[,934]	[,935]	[,936]	[,937]	[,938]	[,939]	[,940]	[,941]	[,942]	[,943]	[,944]	[,945]	[,946]	[,947]	[,948]
[1,]	"T"	"C"	"A"	"C"	"A"	"G"	"T"	"C"	"A"	"C"	"C"	"G"	"C"	"T"	"G"
[2,]	"T"	"C"	"A"	"C"	"A"	"G"	"T"	"C"	"A"	"C"	"C"	"G"	"C"	"T"	"G"
[3,]	"T"	"C"	"A"	"C"	"A"	"G"	"T"	"C"	"A"	"C"	"C"	"G"	"C"	"T"	"G"
[4,]	"T"	"C"	"A"	"C"	"T"	"G"	"T"	"C"	"A"	"C"	"C"	"G"	"C"	"T"	"G"
[5,]	"T"	"C"	"A"	"C"	"T"	"G"	"T"	"C"	"A"	"C"	"C"	"G"	"C"	"T"	"G"
[6,]	"T"	"C"	"A"	"C"	"A"	"G"	"T"	"C"	"A"	"C"	"C"	"G"	"C"	"T"	"G"
	[,949]	[,950]	[,951]	[,952]	[,953]	[,954]	[,955]	[,956]	[,957]	[,958]	[,959]	[,960]	[,961]	[,962]	[,963]
[1,]	"T"	"C"	"A"	"T"	"T"	"G"	"T"	"G"	"G"	"G"	"T"	"A"	"C"	"A"	"A"
[2,]	"T"	"C"	"A"	"T"	"T"	"G"	"T"	"G"	"G"	"G"	"T"	"A"	"C"	"A"	"A"
[3,]	"T"	"C"	"A"	"T"	"T"	"G"	"T"	"T"	"G"	"G"	"T"	"A"	"C"	"A"	"A"
[4,]	"T"	"C"	"A"	"T"	"T"	"G"	"T"	"G"	"G"	"G"	"T"	"A"	"C"	"A"	"A"
[5,]	"T"	"C"	"A"	"T"	"T"	"G"	"T"	"G"	"G"	"G"	"T"	"A"	"C"	"A"	"A"
[6,]	"T"	"C"	"A"	"T"	"T"	"G"	"T"	"G"	"G"	"G"	"T"	"A"	"C"	"A"	"A"
	[,964]	[,965]	[,966]	[,967]	[,968]	[,969]	[,970]	[,971]	[,972]	[,973]	[,974]	[,975]	[,976]	[,977]	[,978]
[1,]	"T"	"C"	"C"	"T"	"T"	"G"	"G"	"A"	"T"	"T"	"T"	"A"	"C"	"C"	"C"
[2,]	"T"	"C"	"C"	"T"	"T"	"G"	"G"	"A"	"T"	"T"	"T"	"A"	"C"	"C"	"C"
[3,]	"T"	"C"	"C"	"T"	"T"	"G"	"G"	"A"	"T"	"T"	"T"	"A"	"C"	"C"	"C"
[4,]	"T"	"C"	"C"	"T"	"T"	"G"	"G"	"A"	"T"	"T"	"T"	"A"	"C"	"C"	"C"
[5,]	"T"	"C"	"C"	"T"	"T"	"G"	"G"	"A"	"T"	"T"	"T"	"A"	"C"	"C"	"C"
[6,]	"T"	"C"	"C"	"T"	"T"	"G"	"G"	"A"	"T"	"T"	"T"	"A"	"C"	"C"	"C"
	[,979]	[,980]	[,981]	[,982]	[,983]	[,984]	[,985]	[,986]	[,987]	[,988]	[,989]	[,990]	[,991]	[,992]	[,993]
[1,]	"T"	"C"	"C"	"G"	"A"	"C"	"C"	"A"	"T"	"A"	"C"	"A"	"G"	"A"	"A"
[2,]	"T"	"C"	"C"	"G"	"A"	"C"	"C"	"A"	"T"	"A"	"C"	"A"	"G"	"A"	"A"
[3,]	"T"	"C"	"C"	"G"	"A"	"C"	"C"	"A"	"T"	"A"	"C"	"A"	"G"	"A"	"A"
[4,]	"T"	"C"	"C"	"G"	"A"	"C"	"C"	"A"	"T"	"A"	"C"	"A"	"G"	"A"	"A"
[5,]	"T"	"C"	"C"	"G"	"A"	"C"	"C"	"A"	"T"	"A"	"C"	"A"	"G"	"A"	"A"
[6,]	"T"	"C"	"C"	"G"	"A"	"C"	"C"	"A"	"T"	"A"	"C"	"A"	"G"	"A"	"A"
	[,994]	[,995]	[,996]	[,997]	[,998]	[,999]	[,1000]	[,1001]	[,1002]	[,1003]	[,1004]	[,1005]	[,1006]	[,1007]	
[1,]	"T"	"G"	"A"	"G"	"C"	"T"	"A"	"C"	"C"	"G"	"G"	"G"	"A"	"A"	
[2,]	"T"	"G"	"A"	"G"	"C"	"T"	"A"	"C"	"C"	"G"	"G"	"G"	"A"	"A"	
[3,]	"T"	"G"	"A"	"G"	"C"	"T"	"A"	"C"	"C"	"G"	"G"	"G"	"A"	"A"	
[4,]	"T"	"G"	"A"	"G"	"C"	"T"	"A"	"C"	"C"	"G"	"G"	"G"	"A"	"A"	
[5,]	"T"	"G"	"A"	"G"	"C"	"T"	"A"	"C"	"C"	"G"	"G"	"G"	"A"	"A"	
[6,]	"T"	"G"	"A"	"G"	"C"	"T"	"A"	"C"	"C"	"G"	"G"	"G"	"A"	"A"	
	[,1008]	[,1009]	[,1010]	[,1011]	[,1012]	[,1013]	[,1014]	[,1015]	[,1016]	[,1017]	[,1018]	[,1019]	[,1020]		

[1,]	"G"	"T"	"C"	"A"	"A"	"G"	"T"	"A"	"C"	"T"	"T"	"C"	"T"
[2,]	"G"	"T"	"C"	"A"	"A"	"G"	"T"	"A"	"C"	"T"	"T"	"C"	"T"
[3,]	"G"	"T"	"C"	"A"	"A"	"G"	"T"	"A"	"C"	"T"	"T"	"C"	"T"
[4,]	"G"	"T"	"C"	"A"	"A"	"G"	"T"	"A"	"C"	"T"	"T"	"C"	"T"
[5,]	"G"	"T"	"C"	"A"	"A"	"G"	"T"	"A"	"C"	"T"	"T"	"C"	"T"
[6,]	"G"	"T"	"C"	"A"	"A"	"G"	"T"	"A"	"C"	"T"	"T"	"C"	"T"
	[,1021]	[,1022]	[,1023]	[,1024]	[,1025]	[,1026]	[,1027]	[,1028]	[,1029]	[,1030]	[,1031]	[,1032]	[,1033]
[1,]	"C"	"C"	"T"	"T"	"T"	"C"	"C"	"T"	"G"	"G"	"G"	"G"	"A"
[2,]	"C"	"C"	"T"	"T"	"T"	"C"	"C"	"T"	"G"	"G"	"G"	"G"	"A"
[3,]	"C"	"C"	"T"	"T"	"T"	"C"	"C"	"T"	"G"	"G"	"G"	"G"	"A"
[4,]	"C"	"C"	"T"	"T"	"T"	"C"	"C"	"T"	"G"	"G"	"G"	"G"	"A"
[5,]	"C"	"C"	"T"	"T"	"T"	"C"	"C"	"T"	"G"	"G"	"G"	"G"	"A"
[6,]	"C"	"C"	"T"	"T"	"T"	"C"	"C"	"T"	"G"	"G"	"G"	"G"	"A"
	[,1034]	[,1035]	[,1036]	[,1037]	[,1038]	[,1039]	[,1040]	[,1041]	[,1042]	[,1043]	[,1044]	[,1045]	[,1046]
[1,]	"A"	"C"	"T"	"T"	"C"	"T"	"G"	"A"	"T"	"G"	"A"	"G"	"G"
[2,]	"A"	"C"	"T"	"T"	"C"	"T"	"G"	"A"	"T"	"G"	"A"	"G"	"G"
[3,]	"A"	"C"	"T"	"T"	"C"	"T"	"G"	"A"	"T"	"G"	"A"	"G"	"G"
[4,]	"A"	"C"	"T"	"T"	"C"	"T"	"G"	"A"	"T"	"G"	"A"	"G"	"G"
[5,]	"A"	"C"	"T"	"T"	"C"	"T"	"G"	"A"	"T"	"G"	"A"	"G"	"G"
[6,]	"A"	"C"	"T"	"T"	"C"	"T"	"G"	"A"	"T"	"G"	"A"	"G"	"G"
	[,1047]	[,1048]	[,1049]	[,1050]	[,1051]	[,1052]	[,1053]	[,1054]	[,1055]	[,1056]	[,1057]	[,1058]	[,1059]
[1,]	"A"	"T"	"G"	"T"	"T"	"A"	"C"	"A"	"G"	"A"	"T"	"G"	"C"
[2,]	"A"	"T"	"G"	"T"	"T"	"A"	"C"	"A"	"G"	"A"	"T"	"G"	"C"
[3,]	"A"	"T"	"G"	"T"	"T"	"A"	"C"	"A"	"G"	"A"	"T"	"G"	"C"
[4,]	"A"	"T"	"G"	"T"	"T"	"A"	"C"	"A"	"G"	"A"	"T"	"G"	"C"
[5,]	"A"	"T"	"G"	"T"	"T"	"A"	"C"	"A"	"G"	"A"	"T"	"G"	"C"
[6,]	"A"	"T"	"G"	"T"	"T"	"A"	"C"	"A"	"G"	"A"	"T"	"G"	"C"
	[,1060]	[,1061]	[,1062]	[,1063]	[,1064]	[,1065]	[,1066]	[,1067]	[,1068]	[,1069]	[,1070]	[,1071]	[,1072]
[1,]	"T"	"G"	"G"	"T"	"C"	"T"	"T"	"A"	"C"	"C"	"A"	"C"	"T"
[2,]	"T"	"G"	"G"	"T"	"C"	"T"	"T"	"A"	"C"	"C"	"A"	"C"	"T"
[3,]	"T"	"G"	"G"	"T"	"C"	"T"	"T"	"A"	"C"	"C"	"A"	"C"	"T"
[4,]	"T"	"G"	"G"	"T"	"C"	"T"	"T"	"A"	"C"	"C"	"A"	"C"	"T"
[5,]	"T"	"G"	"G"	"T"	"C"	"T"	"T"	"A"	"C"	"C"	"A"	"C"	"T"
[6,]	"T"	"G"	"G"	"T"	"C"	"T"	"T"	"A"	"C"	"C"	"A"	"C"	"T"
	[,1073]	[,1074]	[,1075]	[,1076]	[,1077]	[,1078]	[,1079]	[,1080]	[,1081]	[,1082]	[,1083]	[,1084]	[,1085]
[1,]	"T"	"A"	"T"	"C"	"A"	"T"	"C"	"T"	"A"	"C"	"A"	"G"	"T"
[2,]	"T"	"A"	"T"	"C"	"A"	"T"	"C"	"T"	"A"	"C"	"A"	"G"	"T"
[3,]	"T"	"A"	"T"	"C"	"A"	"T"	"C"	"T"	"A"	"C"	"A"	"G"	"T"
[4,]	"T"	"A"	"T"	"C"	"A"	"T"	"C"	"T"	"A"	"C"	"A"	"G"	"T"
[5,]	"T"	"A"	"T"	"C"	"A"	"T"	"C"	"T"	"A"	"C"	"A"	"G"	"T"
[6,]	"T"	"A"	"T"	"C"	"A"	"T"	"C"	"T"	"A"	"C"	"A"	"G"	"T"
	[,1086]	[,1087]	[,1088]	[,1089]	[,1090]	[,1091]	[,1092]	[,1093]	[,1094]	[,1095]	[,1096]	[,1097]	[,1098]
[1,]	"C"	"T"	"T"	"G"	"T"	"C"	"A"	"C"	"A"	"G"	"G"	"A"	"A"
[2,]	"C"	"T"	"T"	"G"	"T"	"C"	"A"	"C"	"A"	"G"	"G"	"A"	"A"
[3,]	"C"	"T"	"T"	"G"	"T"	"C"	"A"	"C"	"A"	"G"	"G"	"A"	"A"
[4,]	"C"	"T"	"T"	"G"	"T"	"C"	"A"	"C"	"A"	"G"	"G"	"A"	"A"
[5,]	"C"	"T"	"T"	"G"	"T"	"C"	"A"	"C"	"A"	"G"	"G"	"A"	"A"
[6,]	"C"	"T"	"T"	"G"	"T"	"C"	"A"	"C"	"A"	"G"	"G"	"A"	"A"
	[,1099]	[,1100]	[,1101]	[,1102]	[,1103]	[,1104]	[,1105]	[,1106]	[,1107]	[,1108]	[,1109]	[,1110]	[,1111]
[1,]	"T"	"G"	"G"	"C"	"G"	"G"	"C"	"G"	"C"	"T"	"A"	"G"	"A"
[2,]	"T"	"G"	"G"	"C"	"G"	"G"	"C"	"G"	"C"	"T"	"A"	"G"	"A"
[3,]	"T"	"G"	"G"	"C"	"G"	"G"	"C"	"G"	"C"	"T"	"A"	"G"	"A"
[4,]	"T"	"G"	"G"	"C"	"G"	"G"	"C"	"T"	"C"	"T"	"A"	"G"	"A"
[5,]	"T"	"G"	"G"	"C"	"A"	"G"	"C"	"G"	"C"	"T"	"A"	"G"	"A"
[6,]	"T"	"G"	"G"	"C"	"G"	"G"	"C"	"G"	"C"	"T"	"A"	"G"	"A"
	[,1112]	[,1113]	[,1114]	[,1115]	[,1116]	[,1117]	[,1118]	[,1119]	[,1120]	[,1121]	[,1122]	[,1123]	[,1124]
[1,]	"T"	"A"	"G"	"T"	"A"	"A"	"G"	"G"	"C"	"A"	"T"	"C"	"A"
[2,]	"T"	"A"	"G"	"T"	"A"	"A"	"G"	"G"	"C"	"A"	"T"	"C"	"A"
[3,]	"T"	"A"	"G"	"T"	"A"	"A"	"G"	"G"	"C"	"A"	"T"	"C"	"A"
[4,]	"T"	"A"	"G"	"T"	"A"	"A"	"G"	"G"	"C"	"A"	"T"	"C"	"A"
[5,]	"T"	"A"	"G"	"T"	"A"	"A"	"G"	"G"	"C"	"A"	"T"	"C"	"A"
[6,]	"T"	"A"	"G"	"T"	"A"	"A"	"G"	"G"	"C"	"A"	"T"	"C"	"A"
	[,1125]	[,1126]	[,1127]	[,1128]	[,1129]	[,1130]	[,1131]	[,1132]	[,1133]	[,1134]	[,1135]	[,1136]	[,1137]
[1,]	"G"	"G"	"G"	"A"	"A"	"G"	"A"	"T"	"G"	"G"	"G"	"A"	"A"
[2,]	"G"	"G"	"G"	"A"	"A"	"G"	"A"	"T"	"G"	"G"	"G"	"A"	"A"
[3,]	"G"	"G"	"G"	"A"	"A"	"G"	"A"	"T"	"G"	"G"	"G"	"A"	"A"
[4,]	"G"	"G"	"G"	"A"	"A"	"G"	"A"	"T"	"G"	"G"	"G"	"A"	"A"
[5,]	"G"	"G"	"G"	"A"	"A"	"G"	"A"	"T"	"G"	"G"	"G"	"A"	"A"
[6,]	"G"	"G"	"G"	"A"	"A"	"G"	"A"	"T"	"G"	"G"	"G"	"A"	"A"
	[,1138]	[,1139]	[,1140]	[,1141]	[,1142]	[,1143]	[,1144]	[,1145]	[,1146]	[,1147]	[,1148]	[,1149]	[,1150]
[1,]	"T"	"G"	"C"	"G"	"A"	"G"	"C"	"T"	"G"	"T"	"A"	"G"	"T"
[2,]	"T"	"G"	"C"	"G"	"A"	"G"	"C"	"T"	"G"	"T"	"A"	"G"	"T"
[3,]	"T"	"G"	"C"	"G"	"A"	"G"	"C"	"T"	"G"	"T"	"A"	"G"	"T"
[4,]	"T"	"G"	"C"	"G"	"A"	"G"	"C"	"T"	"G"	"T"	"A"	"G"	"T"
[5,]	"T"	"G"	"C"	"G"	"A"	"G"	"C"	"T"	"G"	"T"	"A"	"G"	"T"
[6,]	"T"	"G"	"C"	"G"	"A"	"G"	"C"	"T"	"G"	"T"	"A"	"G"	"T"



	[,1151]	[,1152]	[,1153]	[,1154]	[,1155]	[,1156]	[,1157]	[,1158]	[,1159]	[,1160]	[,1161]	[,1162]	[,1163]
[1,]	"C"	"T"	"A"	"T"	"T"	"A"	"T"	"A"	"T"	"G"	"A"	"C"	"T"
[2,]	"C"	"T"	"A"	"T"	"T"	"A"	"T"	"A"	"T"	"G"	"A"	"C"	"T"
[3,]	"C"	"T"	"A"	"T"	"T"	"A"	"T"	"A"	"T"	"G"	"A"	"C"	"T"
[4,]	"C"	"T"	"A"	"T"	"T"	"A"	"T"	"A"	"T"	"G"	"A"	"C"	"T"
[5,]	"C"	"T"	"A"	"T"	"T"	"A"	"T"	"A"	"T"	"G"	"A"	"C"	"T"
[6,]	"C"	"T"	"A"	"T"	"T"	"A"	"T"	"A"	"T"	"G"	"A"	"C"	"T"
	[,1164]	[,1165]	[,1166]	[,1167]	[,1168]	[,1169]	[,1170]	[,1171]	[,1172]	[,1173]	[,1174]	[,1175]	[,1176]
[1,]	"A"	"C"	"C"	"A"	"C"	"C"	"A"	"T"	"C"	"A"	"T"	"T"	"G"
[2,]	"A"	"C"	"C"	"A"	"C"	"C"	"A"	"T"	"C"	"A"	"T"	"T"	"G"
[3,]	"A"	"C"	"C"	"A"	"C"	"C"	"A"	"T"	"C"	"A"	"T"	"T"	"G"
[4,]	"A"	"C"	"C"	"A"	"C"	"C"	"A"	"T"	"C"	"A"	"T"	"T"	"G"
[5,]	"A"	"C"	"C"	"A"	"C"	"C"	"A"	"T"	"C"	"A"	"T"	"T"	"G"
[6,]	"A"	"C"	"C"	"A"	"C"	"C"	"A"	"T"	"C"	"A"	"T"	"T"	"G"
	[,1177]	[,1178]	[,1179]	[,1180]	[,1181]	[,1182]	[,1183]	[,1184]	[,1185]	[,1186]	[,1187]	[,1188]	[,1189]
[1,]	"C"	"T"	"G"	"T"	"G"	"G"	"T"	"G"	"A"	"T"	"T"	"G"	"G"
[2,]	"C"	"T"	"G"	"T"	"G"	"G"	"T"	"G"	"A"	"T"	"T"	"G"	"G"
[3,]	"C"	"T"	"G"	"T"	"G"	"G"	"T"	"G"	"A"	"T"	"T"	"G"	"G"
[4,]	"C"	"T"	"G"	"T"	"G"	"G"	"T"	"G"	"A"	"T"	"T"	"G"	"G"
[5,]	"C"	"T"	"G"	"T"	"G"	"G"	"T"	"G"	"A"	"T"	"T"	"G"	"G"
[6,]	"C"	"T"	"G"	"T"	"G"	"G"	"T"	"G"	"A"	"T"	"T"	"G"	"G"
	[,1190]	[,1191]	[,1192]	[,1193]	[,1194]	[,1195]	[,1196]	[,1197]	[,1198]	[,1199]	[,1200]	[,1201]	[,1202]
[1,]	"C"	"A"	"T"	"A"	"A"	"T"	"C"	"A"	"T"	"T"	"G"	"T"	"C"
[2,]	"C"	"A"	"T"	"A"	"A"	"T"	"C"	"A"	"T"	"T"	"G"	"T"	"C"
[3,]	"C"	"A"	"T"	"A"	"A"	"T"	"C"	"A"	"T"	"T"	"G"	"T"	"C"
[4,]	"C"	"A"	"T"	"A"	"A"	"T"	"C"	"A"	"T"	"T"	"G"	"T"	"C"
[5,]	"C"	"A"	"T"	"A"	"A"	"T"	"C"	"A"	"T"	"T"	"G"	"T"	"C"
[6,]	"C"	"A"	"T"	"A"	"A"	"T"	"C"	"A"	"T"	"T"	"G"	"T"	"C"
	[,1203]	[,1204]	[,1205]	[,1206]	[,1207]	[,1208]	[,1209]	[,1210]	[,1211]	[,1212]	[,1213]	[,1214]	[,1215]
[1,]	"A"	"T"	"C"	"A"	"T"	"C"	"A"	"T"	"C"	"C"	"A"	"T"	"C"
[2,]	"A"	"T"	"C"	"A"	"T"	"C"	"A"	"T"	"C"	"C"	"A"	"T"	"C"
[3,]	"A"	"T"	"C"	"A"	"T"	"C"	"A"	"T"	"C"	"C"	"A"	"T"	"C"
[4,]	"A"	"T"	"C"	"A"	"T"	"C"	"A"	"T"	"C"	"C"	"A"	"T"	"C"
[5,]	"A"	"T"	"C"	"A"	"T"	"C"	"A"	"T"	"C"	"C"	"A"	"T"	"C"
[6,]	"A"	"T"	"C"	"A"	"T"	"C"	"A"	"T"	"C"	"C"	"A"	"T"	"C"
	[,1216]	[,1217]	[,1218]	[,1219]	[,1220]	[,1221]	[,1222]	[,1223]	[,1224]	[,1225]	[,1226]	[,1227]	[,1228]
[1,]	"C"	"T"	"G"	"G"	"G"	"A"	"A"	"G"	"G"	"G"	"C"	"A"	"C"
[2,]	"C"	"T"	"G"	"G"	"G"	"A"	"A"	"G"	"G"	"G"	"C"	"A"	"C"
[3,]	"C"	"T"	"G"	"G"	"G"	"A"	"A"	"G"	"G"	"G"	"C"	"A"	"C"
[4,]	"C"	"T"	"G"	"G"	"G"	"A"	"A"	"G"	"G"	"G"	"C"	"A"	"C"
[5,]	"C"	"T"	"G"	"G"	"G"	"A"	"A"	"G"	"G"	"G"	"C"	"A"	"C"
[6,]	"C"	"T"	"G"	"G"	"G"	"A"	"A"	"G"	"G"	"G"	"C"	"A"	"C"
	[,1229]	[,1230]	[,1231]	[,1232]	[,1233]	[,1234]	[,1235]	[,1236]	[,1237]	[,1238]	[,1239]	[,1240]	[,1241]
[1,]	"A"	"A"	"A"	"G"	"G"	"A"	"A"	"A"	"A"	"C"	"A"	"T"	"G"
[2,]	"A"	"A"	"A"	"G"	"G"	"A"	"A"	"A"	"A"	"C"	"A"	"T"	"G"
[3,]	"A"	"A"	"A"	"G"	"G"	"A"	"A"	"A"	"A"	"C"	"A"	"T"	"G"
[4,]	"A"	"A"	"A"	"G"	"G"	"A"	"A"	"A"	"A"	"C"	"A"	"T"	"G"
[5,]	"A"	"A"	"A"	"G"	"G"	"A"	"A"	"A"	"A"	"C"	"A"	"T"	"G"
[6,]	"A"	"A"	"A"	"G"	"G"	"A"	"A"	"A"	"A"	"C"	"A"	"T"	"G"
	[,1242]	[,1243]	[,1244]	[,1245]	[,1246]	[,1247]	[,1248]	[,1249]	[,1250]	[,1251]	[,1252]	[,1253]	[,1254]
[1,]	"C"	"A"	"C"	"A"	"G"	"A"	"G"	"A"	"A"	"G"	"G"	"C"	"A"
[2,]	"C"	"A"	"C"	"A"	"G"	"A"	"G"	"A"	"A"	"G"	"G"	"C"	"A"
[3,]	"C"	"A"	"C"	"A"	"G"	"A"	"G"	"A"	"A"	"G"	"G"	"C"	"A"
[4,]	"C"	"A"	"C"	"A"	"G"	"A"	"G"	"A"	"A"	"G"	"G"	"C"	"A"
[5,]	"C"	"A"	"C"	"A"	"G"	"A"	"G"	"A"	"A"	"G"	"G"	"C"	"A"
[6,]	"C"	"A"	"C"	"A"	"G"	"A"	"G"	"A"	"A"	"G"	"G"	"C"	"A"
	[,1255]	[,1256]	[,1257]	[,1258]	[,1259]	[,1260]	[,1261]	[,1262]	[,1263]	[,1264]	[,1265]	[,1266]	[,1267]
[1,]	"A"	"A"	"A"	"T"	"T"	"G"	"T"	"A"	"C"	"G"	"A"	"G"	"T"
[2,]	"A"	"A"	"A"	"T"	"T"	"G"	"T"	"A"	"C"	"A"	"A"	"G"	"T"
[3,]	"A"	"A"	"A"	"T"	"T"	"G"	"T"	"A"	"C"	"A"	"A"	"G"	"T"
[4,]	"A"	"A"	"A"	"T"	"T"	"G"	"T"	"A"	"C"	"A"	"A"	"G"	"T"
[5,]	"A"	"A"	"A"	"T"	"T"	"G"	"T"	"A"	"C"	"A"	"A"	"G"	"T"
[6,]	"A"	"A"	"A"	"T"	"T"	"G"	"T"	"A"	"C"	"A"	"A"	"G"	"T"
	[,1268]	[,1269]	[,1270]	[,1271]	[,1272]	[,1273]	[,1274]	[,1275]	[,1276]	[,1277]	[,1278]	[,1279]	[,1280]
[1,]	"G"	"A"	"C"	"A"	"G"	"C"	"T"	"G"	"C"	"A"	"G"	"A"	"T"
[2,]	"G"	"A"	"C"	"A"	"G"	"C"	"T"	"G"	"C"	"A"	"G"	"A"	"T"
[3,]	"G"	"A"	"C"	"A"	"G"	"C"	"T"	"G"	"C"	"A"	"G"	"A"	"T"
[4,]	"G"	"A"	"C"	"A"	"G"	"C"	"T"	"G"	"C"	"A"	"G"	"A"	"T"
[5,]	"G"	"A"	"C"	"A"	"G"	"C"	"T"	"G"	"C"	"A"	"G"	"A"	"T"
[6,]	"G"	"A"	"C"	"A"	"G"	"C"	"T"	"G"	"C"	"A"	"G"	"A"	"T"
	[,1281]	[,1282]	[,1283]	[,1284]	[,1285]	[,1286]	[,1287]	[,1288]	[,1289]	[,1290]	[,1291]	[,1292]	[,1293]
[1,]	"G"	"C"	"T"	"T"	"C"	"C"	"T"	"T"	"G"	"G"	"A"	"C"	"T"
[2,]	"G"	"C"	"C"	"T"	"T"	"C"	"C"	"T"	"G"	"G"	"A"	"C"	"T"
[3,]	"G"	"C"	"C"	"T"	"T"	"C"	"C"	"T"	"G"	"G"	"A"	"C"	"T"
[4,]	"G"	"C"	"C"	"T"	"T"	"C"	"C"	"T"	"G"	"G"	"A"	"C"	"T"
[5,]	"G"	"C"	"C"	"T"	"T"	"C"	"C"	"T"	"G"	"G"	"A"	"C"	"T"

[6,]	"G"	"C"	"C"	"T"	"T"	"C"	"C"	"T"	"G"	"G"	"A"	"C"	"T"
	[,1294]	[,1295]	[,1296]	[,1297]	[,1298]	[,1299]	[,1300]	[,1301]	[,1302]	[,1303]	[,1304]	[,1305]	[,1306]
[1,]	"T"	"G"	"A"	"T"	"C"	"A"	"G"	"G"	"A"	"A"	"C"	"A"	"T"
[2,]	"T"	"G"	"A"	"T"	"C"	"A"	"G"	"G"	"A"	"A"	"C"	"A"	"T"
[3,]	"T"	"G"	"A"	"T"	"C"	"A"	"G"	"G"	"A"	"A"	"C"	"A"	"T"
[4,]	"T"	"G"	"A"	"T"	"C"	"A"	"G"	"G"	"A"	"A"	"C"	"A"	"T"
[5,]	"T"	"G"	"A"	"T"	"C"	"A"	"G"	"G"	"A"	"A"	"C"	"A"	"T"
[6,]	"T"	"G"	"A"	"T"	"C"	"A"	"G"	"G"	"A"	"A"	"C"	"A"	"T"
	[,1307]	[,1308]	[,1309]	[,1310]	[,1311]	[,1312]	[,1313]	[,1314]	[,1315]	[,1316]	[,1317]	[,1318]	[,1319]
[1,]	"G"	"T"	"T"	"C"	"C"	"C"	"T"	"C"	"C"	"A"	"A"	"A"	"T"
[2,]	"G"	"T"	"T"	"C"	"C"	"C"	"T"	"C"	"C"	"A"	"A"	"A"	"T"
[3,]	"G"	"T"	"T"	"C"	"C"	"C"	"T"	"C"	"C"	"A"	"A"	"A"	"T"
[4,]	"G"	"T"	"T"	"C"	"C"	"C"	"T"	"C"	"C"	"G"	"A"	"A"	"T"
[5,]	"G"	"T"	"T"	"C"	"C"	"C"	"T"	"C"	"C"	"A"	"A"	"A"	"T"
[6,]	"G"	"T"	"T"	"C"	"C"	"C"	"T"	"C"	"C"	"A"	"A"	"A"	"T"
	[,1320]	[,1321]	[,1322]	[,1323]	[,1324]	[,1325]	[,1326]	[,1327]	[,1328]	[,1329]	[,1330]	[,1331]	[,1332]
[1,]	"C"	"T"	"G"	"G"	"T"	"A"	"G"	"A"	"A"	"G"	"C"	"C"	"T"
[2,]	"C"	"T"	"G"	"G"	"T"	"A"	"G"	"A"	"A"	"G"	"C"	"C"	"T"
[3,]	"C"	"T"	"G"	"G"	"T"	"A"	"G"	"A"	"A"	"G"	"C"	"C"	"T"
[4,]	"C"	"T"	"G"	"G"	"T"	"A"	"G"	"A"	"A"	"G"	"C"	"C"	"T"
[5,]	"C"	"T"	"G"	"G"	"T"	"A"	"G"	"A"	"A"	"G"	"C"	"C"	"T"
[6,]	"C"	"T"	"G"	"G"	"T"	"A"	"G"	"A"	"A"	"G"	"C"	"C"	"T"
	[,1333]	[,1334]	[,1335]	[,1336]	[,1337]	[,1338]	[,1339]	[,1340]	[,1341]	[,1342]	[,1343]	[,1344]	[,1345]
[1,]	"G"	"C"	"T"	"T"	"T"	"A"	"A"	"A"	"C"	"A"	"G"	"T"	"T"
[2,]	"G"	"C"	"T"	"T"	"T"	"A"	"A"	"A"	"C"	"A"	"G"	"T"	"T"
[3,]	"G"	"C"	"T"	"T"	"T"	"A"	"A"	"A"	"C"	"A"	"G"	"T"	"T"
[4,]	"G"	"C"	"T"	"T"	"T"	"A"	"A"	"A"	"C"	"A"	"G"	"T"	"T"
[5,]	"G"	"C"	"T"	"T"	"T"	"A"	"A"	"A"	"C"	"A"	"G"	"T"	"T"
[6,]	"G"	"C"	"T"	"T"	"T"	"A"	"A"	"A"	"C"	"A"	"G"	"T"	"T"
	[,1346]	[,1347]	[,1348]	[,1349]	[,1350]	[,1351]	[,1352]	[,1353]	[,1354]	[,1355]	[,1356]	[,1357]	[,1358]
[1,]	"T"	"A"	"A"	"A"	"A"	"C"	"C"	"A"	"A"	"C"	"T"	"A"	"T"
[2,]	"T"	"A"	"A"	"A"	"A"	"C"	"C"	"A"	"A"	"C"	"T"	"A"	"T"
[3,]	"T"	"A"	"A"	"A"	"A"	"C"	"C"	"A"	"A"	"C"	"T"	"A"	"T"
[4,]	"T"	"A"	"A"	"A"	"A"	"C"	"C"	"A"	"A"	"C"	"T"	"A"	"T"
[5,]	"T"	"A"	"A"	"A"	"A"	"C"	"C"	"A"	"A"	"C"	"T"	"A"	"T"
[6,]	"T"	"A"	"A"	"A"	"A"	"C"	"C"	"A"	"A"	"C"	"T"	"A"	"T"
	[,1359]	[,1360]	[,1361]	[,1362]	[,1363]	[,1364]	[,1365]	[,1366]	[,1367]	[,1368]	[,1369]	[,1370]	[,1371]
[1,]	"G"	"A"	"G"	"A"	"A"	"G"	"A"	"G"	"A"	"A"	"G"	"C"	"T"
[2,]	"G"	"A"	"G"	"A"	"A"	"G"	"A"	"G"	"A"	"A"	"G"	"C"	"T"
[3,]	"G"	"A"	"G"	"A"	"A"	"G"	"A"	"G"	"A"	"A"	"G"	"C"	"T"
[4,]	"G"	"A"	"G"	"A"	"A"	"G"	"A"	"G"	"A"	"A"	"G"	"C"	"T"
[5,]	"G"	"A"	"G"	"A"	"A"	"G"	"A"	"G"	"A"	"A"	"G"	"C"	"T"
[6,]	"G"	"A"	"G"	"A"	"A"	"G"	"A"	"G"	"A"	"A"	"G"	"C"	"T"
	[,1372]	[,1373]	[,1374]	[,1375]	[,1376]	[,1377]	[,1378]	[,1379]	[,1380]	[,1381]	[,1382]	[,1383]	[,1384]
[1,]	"T"	"T"	"A"	"A"	"A"	"G"	"T"	"G"	"C"	"C"	"C"	"A"	"T"
[2,]	"T"	"T"	"A"	"A"	"A"	"G"	"T"	"G"	"C"	"C"	"C"	"A"	"T"
[3,]	"T"	"T"	"A"	"A"	"A"	"G"	"T"	"G"	"C"	"C"	"C"	"A"	"T"
[4,]	"T"	"T"	"A"	"A"	"A"	"G"	"T"	"G"	"C"	"C"	"C"	"A"	"T"
[5,]	"T"	"T"	"A"	"A"	"A"	"G"	"T"	"G"	"C"	"C"	"C"	"A"	"T"
[6,]	"T"	"T"	"A"	"A"	"A"	"G"	"T"	"G"	"C"	"C"	"C"	"A"	"T"
	[,1385]	[,1386]	[,1387]	[,1388]	[,1389]	[,1390]	[,1391]	[,1392]	[,1393]	[,1394]	[,1395]	[,1396]	[,1397]
[1,]	"C"	"C"	"A"	"G"	"G"	"C"	"C"	"A"	"A"	"C"	"G"	"A"	"A"
[2,]	"C"	"C"	"A"	"G"	"G"	"C"	"C"	"A"	"A"	"C"	"G"	"A"	"A"
[3,]	"C"	"C"	"A"	"G"	"G"	"C"	"C"	"A"	"A"	"C"	"G"	"A"	"A"
[4,]	"C"	"C"	"A"	"G"	"G"	"C"	"C"	"A"	"A"	"C"	"G"	"A"	"A"
[5,]	"C"	"C"	"A"	"G"	"G"	"C"	"C"	"A"	"A"	"C"	"G"	"A"	"A"
[6,]	"C"	"C"	"A"	"G"	"G"	"C"	"C"	"A"	"A"	"C"	"G"	"A"	"A"
	[,1398]	[,1399]	[,1400]	[,1401]	[,1402]	[,1403]	[,1404]	[,1405]	[,1406]	[,1407]	[,1408]	[,1409]	[,1410]
[1,]	"A"	"C"	"G"	"C"	"T"	"T"	"G"	"T"	"G"	"G"	"G"	"T"	"G"
[2,]	"A"	"C"	"G"	"C"	"T"	"T"	"G"	"T"	"G"	"G"	"G"	"T"	"G"
[3,]	"A"	"C"	"G"	"C"	"T"	"T"	"G"	"T"	"G"	"G"	"G"	"T"	"G"
[4,]	"A"	"C"	"G"	"C"	"T"	"T"	"G"	"T"	"G"	"G"	"G"	"T"	"G"
[5,]	"A"	"C"	"G"	"C"	"T"	"T"	"G"	"T"	"G"	"G"	"G"	"T"	"G"
[6,]	"A"	"C"	"G"	"C"	"T"	"T"	"G"	"T"	"G"	"G"	"G"	"T"	"G"
	[,1411]	[,1412]	[,1413]	[,1414]	[,1415]	[,1416]	[,1417]	[,1418]	[,1419]	[,1420]	[,1421]	[,1422]	[,1423]
[1,]	"C"	"T"	"G"	"T"	"G"	"A"	"T"	"A"	"A"	"A"	"C"	"A"	"A"
[2,]	"C"	"T"	"G"	"T"	"G"	"A"	"T"	"A"	"A"	"A"	"C"	"A"	"A"
[3,]	"C"	"T"	"G"	"T"	"G"	"A"	"T"	"A"	"A"	"A"	"C"	"A"	"A"
[4,]	"C"	"T"	"G"	"T"	"G"	"A"	"T"	"A"	"A"	"A"	"C"	"A"	"A"
[5,]	"C"	"T"	"G"	"T"	"G"	"A"	"T"	"A"	"A"	"A"	"C"	"A"	"A"
[6,]	"C"	"T"	"G"	"T"	"G"	"A"	"T"	"A"	"A"	"A"	"C"	"A"	"A"
	[,1424]	[,1425]	[,1426]	[,1427]	[,1428]	[,1429]	[,1430]	[,1431]	[,1432]	[,1433]	[,1434]	[,1435]	[,1436]
[1,]	"T"	"G"	"T"	"G"	"T"	"C"	"T"	"G"	"A"	"G"	"G"	"C"	"C"
[2,]	"T"	"G"	"T"	"G"	"T"	"C"	"T"	"G"	"A"	"G"	"G"	"C"	"C"
[3,]	"T"	"G"	"T"	"G"	"T"	"C"	"T"	"G"	"A"	"G"	"G"	"C"	"C"
[4,]	"C"	"G"	"T"	"G"	"T"	"C"	"T"	"G"	"A"	"G"	"G"	"C"	"C"

[5,]	"T"	"G"	"T"	"G"	"T"	"C"	"T"	"G"	"A"	"G"	"G"	"C"	"C"
[6,]	"T"	"G"	"T"	"G"	"T"	"C"	"T"	"G"	"A"	"G"	"G"	"C"	"C"
	[,1437]	[,1438]	[,1439]	[,1440]	[,1441]	[,1442]	[,1443]	[,1444]	[,1445]	[,1446]	[,1447]	[,1448]	[,1449]
[1,]	"A"	"T"	"G"	"G"	"A"	"G"	"A"	"C"	"T"	"C"	"T"	"T"	"A"
[2,]	"A"	"T"	"G"	"G"	"A"	"G"	"A"	"C"	"T"	"C"	"T"	"T"	"A"
[3,]	"A"	"T"	"G"	"G"	"A"	"G"	"A"	"C"	"T"	"C"	"T"	"C"	"A"
[4,]	"A"	"T"	"G"	"G"	"A"	"G"	"A"	"C"	"T"	"C"	"T"	"T"	"A"
[5,]	"A"	"T"	"G"	"G"	"A"	"G"	"A"	"C"	"T"	"C"	"T"	"T"	"A"
[6,]	"A"	"T"	"G"	"G"	"A"	"G"	"A"	"C"	"T"	"C"	"T"	"C"	"A"
	[,1450]	[,1451]	[,1452]	[,1453]	[,1454]	[,1455]	[,1456]	[,1457]	[,1458]	[,1459]	[,1460]	[,1461]	[,1462]
[1,]	"C"	"C"	"C"	"G"	"A"	"A"	"T"	"C"	"A"	"C"	"A"	"G"	"A"
[2,]	"C"	"C"	"C"	"G"	"A"	"A"	"T"	"C"	"A"	"C"	"A"	"G"	"A"
[3,]	"C"	"C"	"C"	"G"	"A"	"A"	"T"	"C"	"A"	"C"	"A"	"G"	"A"
[4,]	"C"	"C"	"C"	"G"	"A"	"A"	"T"	"C"	"A"	"C"	"A"	"G"	"A"
[5,]	"C"	"C"	"C"	"G"	"A"	"A"	"T"	"C"	"A"	"C"	"A"	"G"	"A"
[6,]	"C"	"C"	"C"	"G"	"A"	"A"	"T"	"C"	"A"	"C"	"A"	"G"	"A"
	[,1463]	[,1464]	[,1465]	[,1466]	[,1467]	[,1468]	[,1469]	[,1470]	[,1471]	[,1472]	[,1473]	[,1474]	[,1475]
[1,]	"G"	"G"	"A"	"G"	"C"	"T"	"G"	"G"	"T"	"C"	"C"	"C"	"A"
[2,]	"G"	"G"	"A"	"G"	"C"	"T"	"G"	"G"	"T"	"C"	"C"	"C"	"A"
[3,]	"G"	"G"	"A"	"G"	"C"	"T"	"G"	"G"	"T"	"C"	"C"	"C"	"A"
[4,]	"G"	"G"	"A"	"G"	"C"	"T"	"G"	"G"	"T"	"C"	"C"	"C"	"A"
[5,]	"G"	"G"	"A"	"G"	"C"	"T"	"G"	"G"	"T"	"C"	"C"	"C"	"A"
[6,]	"G"	"G"	"A"	"G"	"C"	"T"	"G"	"G"	"T"	"C"	"C"	"C"	"A"
	[,1476]	[,1477]	[,1478]	[,1479]	[,1480]	[,1481]	[,1482]	[,1483]	[,1484]	[,1485]	[,1486]	[,1487]	[,1488]
[1,]	"G"	"T"	"T"	"C"	"C"	"A"	"G"	"G"	"A"	"T"	"C"	"T"	"G"
[2,]	"G"	"T"	"T"	"C"	"C"	"A"	"G"	"G"	"A"	"T"	"C"	"T"	"G"
[3,]	"G"	"T"	"T"	"C"	"C"	"A"	"G"	"G"	"A"	"T"	"C"	"T"	"G"
[4,]	"G"	"T"	"T"	"C"	"C"	"A"	"G"	"G"	"A"	"T"	"C"	"T"	"G"
[5,]	"G"	"T"	"T"	"C"	"C"	"A"	"G"	"G"	"A"	"T"	"C"	"T"	"G"
[6,]	"G"	"T"	"T"	"C"	"C"	"A"	"G"	"G"	"A"	"T"	"C"	"T"	"G"
	[,1489]	[,1490]	[,1491]	[,1492]	[,1493]	[,1494]	[,1495]	[,1496]	[,1497]	[,1498]	[,1499]	[,1500]	[,1501]
[1,]	"T"	"G"	"A"	"A"	"T"	"G"	"G"	"A"	"G"	"T"	"C"	"A"	"A"
[2,]	"T"	"G"	"A"	"A"	"T"	"G"	"G"	"A"	"G"	"T"	"C"	"A"	"A"
[3,]	"T"	"G"	"A"	"A"	"T"	"G"	"G"	"A"	"G"	"T"	"C"	"A"	"A"
[4,]	"T"	"G"	"A"	"A"	"T"	"G"	"G"	"A"	"G"	"T"	"C"	"A"	"A"
[5,]	"T"	"G"	"A"	"A"	"T"	"G"	"G"	"A"	"G"	"T"	"C"	"A"	"A"
[6,]	"T"	"G"	"A"	"A"	"T"	"G"	"G"	"A"	"G"	"T"	"C"	"A"	"A"
	[,1502]	[,1503]	[,1504]	[,1505]	[,1506]	[,1507]	[,1508]	[,1509]	[,1510]	[,1511]	[,1512]	[,1513]	[,1514]
[1,]	"T"	"G"	"C"	"C"	"C"	"T"	"G"	"G"	"G"	"T"	"C"	"T"	"A"
[2,]	"T"	"G"	"C"	"C"	"C"	"T"	"G"	"G"	"G"	"T"	"C"	"T"	"A"
[3,]	"T"	"G"	"C"	"C"	"C"	"T"	"G"	"G"	"G"	"T"	"C"	"T"	"A"
[4,]	"T"	"G"	"C"	"C"	"C"	"T"	"G"	"G"	"G"	"T"	"C"	"T"	"A"
[5,]	"T"	"G"	"C"	"C"	"C"	"T"	"G"	"G"	"G"	"T"	"C"	"T"	"A"
[6,]	"T"	"G"	"C"	"C"	"C"	"T"	"G"	"G"	"G"	"T"	"C"	"T"	"A"
	[,1515]	[,1516]	[,1517]	[,1518]	[,1519]	[,1520]	[,1521]	[,1522]	[,1523]	[,1524]	[,1525]	[,1526]	[,1527]
[1,]	"G"	"T"	"T"	"G"	"T"	"C"	"T"	"T"	"C"	"T"	"C"	"C"	"A"
[2,]	"G"	"T"	"T"	"G"	"T"	"C"	"T"	"T"	"C"	"T"	"C"	"C"	"A"
[3,]	"G"	"T"	"T"	"G"	"T"	"C"	"T"	"T"	"C"	"T"	"C"	"C"	"A"
[4,]	"G"	"T"	"T"	"G"	"T"	"C"	"T"	"T"	"C"	"T"	"C"	"C"	"A"
[5,]	"G"	"T"	"T"	"G"	"T"	"C"	"T"	"T"	"C"	"T"	"C"	"C"	"A"
[6,]	"G"	"T"	"T"	"G"	"T"	"C"	"T"	"T"	"C"	"T"	"C"	"C"	"A"
	[,1528]	[,1529]	[,1530]	[,1531]	[,1532]	[,1533]	[,1534]	[,1535]	[,1536]	[,1537]	[,1538]	[,1539]	[,1540]
[1,]	"T"	"G"	"T"	"G"	"C"	"T"	"T"	"C"	"G"	"G"	"T"	"T"	"T"
[2,]	"T"	"G"	"T"	"G"	"C"	"T"	"T"	"C"	"G"	"G"	"T"	"T"	"T"
[3,]	"T"	"G"	"T"	"G"	"C"	"T"	"T"	"C"	"G"	"G"	"T"	"T"	"T"
[4,]	"T"	"G"	"T"	"G"	"C"	"T"	"T"	"C"	"G"	"G"	"T"	"T"	"T"
[5,]	"T"	"G"	"T"	"G"	"C"	"T"	"T"	"C"	"G"	"G"	"T"	"T"	"T"
[6,]	"T"	"G"	"T"	"G"	"C"	"T"	"T"	"C"	"G"	"G"	"T"	"T"	"T"
	[,1541]	[,1542]	[,1543]	[,1544]	[,1545]	[,1546]	[,1547]	[,1548]	[,1549]	[,1550]	[,1551]	[,1552]	[,1553]
[1,]	"T"	"G"	"T"	"G"	"A"	"T"	"T"	"G"	"G"	"A"	"A"	"A"	"C"
[2,]	"T"	"G"	"T"	"G"	"A"	"T"	"T"	"G"	"G"	"A"	"A"	"A"	"C"
[3,]	"T"	"G"	"T"	"G"	"A"	"T"	"T"	"G"	"G"	"A"	"A"	"A"	"C"
[4,]	"T"	"G"	"T"	"G"	"A"	"T"	"T"	"G"	"G"	"A"	"A"	"A"	"C"
[5,]	"T"	"G"	"T"	"G"	"A"	"T"	"T"	"G"	"G"	"A"	"A"	"A"	"C"
[6,]	"T"	"G"	"T"	"G"	"A"	"T"	"T"	"G"	"G"	"A"	"A"	"A"	"C"
	[,1554]	[,1555]	[,1556]	[,1557]	[,1558]	[,1559]	[,1560]	[,1561]	[,1562]	[,1563]	[,1564]	[,1565]	[,1566]
[1,]	"A"	"T"	"G"	"A"	"A"	"G"	"G"	"A"	"A"	"C"	"A"	"G"	"G"
[2,]	"A"	"T"	"G"	"A"	"A"	"G"	"G"	"A"	"A"	"C"	"A"	"G"	"G"
[3,]	"A"	"T"	"G"	"A"	"A"	"G"	"G"	"A"	"A"	"C"	"A"	"G"	"G"
[4,]	"A"	"T"	"G"	"A"	"A"	"G"	"G"	"A"	"A"	"C"	"A"	"G"	"G"
[5,]	"A"	"T"	"G"	"A"	"A"	"G"	"G"	"A"	"A"	"C"	"A"	"G"	"G"
[6,]	"A"	"T"	"G"	"A"	"A"	"G"	"G"	"A"	"A"	"C"	"A"	"G"	"G"
	[,1567]	[,1568]	[,1569]	[,1570]	[,1571]	[,1572]	[,1573]	[,1574]	[,1575]	[,1576]	[,1577]	[,1578]	[,1579]
[1,]	"G"	"G"	"C"	"A"	"G"	"G"	"C"	"C"	"C"	"T"	"G"	"A"	"G"
[2,]	"G"	"G"	"C"	"A"	"G"	"G"	"C"	"T"	"C"	"T"	"G"	"A"	"G"
[3,]	"G"	"G"	"C"	"A"	"G"	"G"	"C"	"C"	"C"	"T"	"G"	"A"	"G"

[4,]	"G"	"G"	"C"	"A"	"G"	"G"	"C"	"C"	"C"	"T"	"G"	"A"	"G"
[5,]	"G"	"G"	"C"	"A"	"G"	"G"	"C"	"C"	"C"	"T"	"G"	"A"	"G"
[6,]	"G"	"G"	"C"	"A"	"G"	"G"	"C"	"C"	"C"	"T"	"G"	"A"	"G"
	[,1580]	[,1581]	[,1582]	[,1583]	[,1584]	[,1585]	[,1586]	[,1587]	[,1588]	[,1589]	[,1590]	[,1591]	[,1592]
[1,]	"A"	"G"	"A"	"G"	"T"	"T"	"C"	"T"	"T"	"T"	"G"	"A"	"T"
[2,]	"A"	"G"	"A"	"G"	"T"	"T"	"C"	"T"	"T"	"T"	"G"	"A"	"T"
[3,]	"A"	"G"	"A"	"G"	"T"	"T"	"C"	"T"	"T"	"T"	"G"	"A"	"T"
[4,]	"A"	"G"	"A"	"G"	"T"	"T"	"C"	"T"	"T"	"T"	"G"	"A"	"T"
[5,]	"A"	"G"	"A"	"G"	"T"	"T"	"C"	"T"	"T"	"T"	"G"	"A"	"T"
[6,]	"A"	"G"	"A"	"G"	"T"	"T"	"C"	"T"	"T"	"T"	"G"	"A"	"T"
	[,1593]	[,1594]	[,1595]	[,1596]	[,1597]	[,1598]	[,1599]	[,1600]	[,1601]	[,1602]	[,1603]	[,1604]	[,1605]
[1,]	"T"	"C"	"T"	"C"	"T"	"T"	"A"	"A"	"C"	"G"	"A"	"A"	"G"
[2,]	"T"	"C"	"T"	"C"	"T"	"T"	"A"	"A"	"C"	"G"	"A"	"A"	"G"
[3,]	"T"	"C"	"T"	"C"	"T"	"T"	"A"	"A"	"C"	"G"	"A"	"A"	"G"
[4,]	"T"	"C"	"T"	"C"	"T"	"T"	"A"	"A"	"T"	"G"	"A"	"A"	"G"
[5,]	"T"	"C"	"T"	"C"	"T"	"T"	"A"	"A"	"C"	"G"	"A"	"A"	"G"
[6,]	"T"	"C"	"T"	"C"	"T"	"T"	"A"	"A"	"C"	"G"	"A"	"A"	"G"
	[,1606]	[,1607]	[,1608]	[,1609]	[,1610]	[,1611]	[,1612]	[,1613]	[,1614]	[,1615]	[,1616]	[,1617]	[,1618]
[1,]	"C"	"C"	"A"	"T"	"C"	"A"	"T"	"G"	"A"	"G"	"A"	"C"	"T"
[2,]	"C"	"C"	"A"	"T"	"C"	"A"	"T"	"G"	"A"	"G"	"A"	"C"	"T"
[3,]	"C"	"C"	"A"	"T"	"C"	"A"	"T"	"G"	"A"	"G"	"A"	"C"	"T"
[4,]	"C"	"C"	"A"	"T"	"C"	"A"	"T"	"G"	"A"	"G"	"A"	"C"	"T"
[5,]	"C"	"C"	"A"	"T"	"C"	"A"	"T"	"G"	"A"	"G"	"A"	"C"	"T"
[6,]	"C"	"C"	"A"	"T"	"C"	"A"	"T"	"G"	"A"	"G"	"A"	"C"	"T"
	[,1619]	[,1620]	[,1621]	[,1622]	[,1623]	[,1624]	[,1625]	[,1626]	[,1627]	[,1628]	[,1629]	[,1630]	[,1631]
[1,]	"G"	"G"	"T"	"A"	"G"	"C"	"A"	"G"	"T"	"A"	"A"	"T"	"A"
[2,]	"G"	"G"	"T"	"A"	"G"	"C"	"A"	"G"	"T"	"A"	"A"	"T"	"A"
[3,]	"G"	"G"	"T"	"A"	"G"	"C"	"A"	"G"	"T"	"A"	"A"	"T"	"A"
[4,]	"G"	"G"	"T"	"A"	"G"	"C"	"A"	"G"	"T"	"A"	"A"	"T"	"A"
[5,]	"G"	"G"	"T"	"A"	"G"	"C"	"A"	"G"	"T"	"A"	"A"	"T"	"A"
[6,]	"G"	"G"	"T"	"A"	"G"	"C"	"A"	"G"	"T"	"A"	"A"	"T"	"A"
	[,1632]	[,1633]	[,1634]	[,1635]	[,1636]	[,1637]	[,1638]	[,1639]	[,1640]	[,1641]	[,1642]	[,1643]	[,1644]
[1,]	"A"	"T"	"G"	"T"	"G"	"G"	"T"	"A"	"T"	"G"	"C"	"C"	"C"
[2,]	"A"	"T"	"G"	"T"	"G"	"G"	"T"	"A"	"T"	"G"	"C"	"C"	"C"
[3,]	"A"	"T"	"G"	"T"	"G"	"G"	"T"	"A"	"T"	"G"	"C"	"C"	"C"
[4,]	"A"	"T"	"G"	"T"	"G"	"G"	"T"	"A"	"T"	"G"	"C"	"C"	"C"
[5,]	"A"	"T"	"G"	"T"	"G"	"G"	"T"	"A"	"T"	"G"	"C"	"C"	"C"
[6,]	"A"	"T"	"G"	"T"	"G"	"G"	"T"	"A"	"T"	"G"	"C"	"C"	"C"
	[,1645]	[,1646]	[,1647]	[,1648]	[,1649]	[,1650]	[,1651]	[,1652]	[,1653]	[,1654]	[,1655]	[,1656]	[,1657]
[1,]	"C"	"C"	"G"	"T"	"G"	"G"	"G"	"T"	"A"	"T"	"T"	"C"	"T"
[2,]	"C"	"C"	"G"	"T"	"G"	"G"	"G"	"T"	"A"	"T"	"T"	"C"	"T"
[3,]	"C"	"C"	"G"	"T"	"G"	"G"	"G"	"T"	"A"	"T"	"T"	"C"	"T"
[4,]	"C"	"C"	"G"	"T"	"G"	"G"	"G"	"T"	"A"	"T"	"T"	"C"	"T"
[5,]	"C"	"C"	"G"	"T"	"G"	"G"	"G"	"T"	"A"	"T"	"T"	"C"	"T"
[6,]	"C"	"C"	"G"	"T"	"G"	"G"	"G"	"T"	"A"	"T"	"T"	"C"	"T"
	[,1658]	[,1659]	[,1660]	[,1661]	[,1662]	[,1663]	[,1664]	[,1665]	[,1666]	[,1667]	[,1668]	[,1669]	[,1670]
[1,]	"C"	"T"	"C"	"C"	"C"	"T"	"G"	"A"	"T"	"T"	"G"	"C"	"T"
[2,]	"C"	"T"	"T"	"C"	"C"	"T"	"G"	"A"	"T"	"T"	"G"	"C"	"T"
[3,]	"C"	"T"	"T"	"C"	"C"	"T"	"G"	"A"	"T"	"T"	"G"	"C"	"T"
[4,]	"C"	"T"	"T"	"C"	"C"	"T"	"G"	"A"	"T"	"T"	"G"	"C"	"T"
[5,]	"C"	"T"	"T"	"C"	"C"	"T"	"G"	"A"	"T"	"T"	"G"	"C"	"T"
[6,]	"C"	"T"	"T"	"C"	"C"	"T"	"G"	"A"	"T"	"T"	"G"	"C"	"T"
	[,1671]	[,1672]	[,1673]	[,1674]	[,1675]	[,1676]	[,1677]	[,1678]	[,1679]	[,1680]	[,1681]	[,1682]	[,1683]
[1,]	"G"	"G"	"G"	"A"	"A"	"G"	"A"	"T"	"T"	"G"	"T"	"G"	"G"
[2,]	"G"	"G"	"G"	"A"	"A"	"G"	"A"	"T"	"T"	"G"	"T"	"G"	"G"
[3,]	"G"	"G"	"G"	"A"	"A"	"G"	"A"	"T"	"T"	"G"	"T"	"G"	"G"
[4,]	"G"	"G"	"G"	"A"	"A"	"G"	"A"	"T"	"T"	"G"	"T"	"G"	"G"
[5,]	"G"	"G"	"G"	"A"	"A"	"G"	"A"	"T"	"T"	"G"	"T"	"G"	"G"
[6,]	"G"	"G"	"G"	"A"	"A"	"G"	"A"	"T"	"T"	"G"	"T"	"G"	"G"
	[,1684]	[,1685]	[,1686]	[,1687]	[,1688]	[,1689]	[,1690]	[,1691]	[,1692]	[,1693]	[,1694]	[,1695]	[,1696]
[1,]	"A"	"G"	"A"	"T"	"G"	"G"	"A"	"A"	"G"	"A"	"C"	"A"	"T"
[2,]	"A"	"G"	"A"	"T"	"G"	"G"	"A"	"A"	"G"	"A"	"C"	"A"	"T"
[3,]	"A"	"G"	"A"	"T"	"G"	"G"	"A"	"A"	"G"	"A"	"C"	"A"	"T"
[4,]	"A"	"G"	"A"	"T"	"G"	"G"	"A"	"A"	"G"	"A"	"C"	"A"	"T"
[5,]	"A"	"G"	"A"	"T"	"G"	"G"	"A"	"A"	"G"	"A"	"C"	"A"	"T"
[6,]	"A"	"G"	"A"	"T"	"G"	"G"	"A"	"A"	"G"	"A"	"C"	"A"	"T"
	[,1697]	[,1698]	[,1699]	[,1700]	[,1701]	[,1702]	[,1703]	[,1704]	[,1705]	[,1706]	[,1707]	[,1708]	[,1709]
[1,]	"G"	"G"	"G"	"T"	"G"	"T"	"G"	"A"	"T"	"T"	"G"	"G"	"G"
[2,]	"G"	"G"	"G"	"T"	"G"	"T"	"G"	"A"	"T"	"T"	"G"	"G"	"G"
[3,]	"G"	"G"	"G"	"T"	"G"	"T"	"G"	"A"	"T"	"T"	"G"	"G"	"G"
[4,]	"G"	"G"	"G"	"C"	"G"	"T"	"G"	"A"	"T"	"T"	"G"	"G"	"G"
[5,]	"G"	"G"	"G"	"T"	"G"	"T"	"G"	"A"	"T"	"T"	"G"	"G"	"G"
[6,]	"G"	"G"	"G"	"T"	"G"	"T"	"G"	"A"	"T"	"T"	"G"	"G"	"G"
	[,1710]	[,1711]	[,1712]	[,1713]	[,1714]	[,1715]	[,1716]	[,1717]	[,1718]	[,1719]	[,1720]	[,1721]	[,1722]
[1,]	"G"	"G"	"G"	"C"	"A"	"G"	"C"	"T"	"T"	"G"	"C"	"C"	"A"
[2,]	"G"	"G"	"G"	"C"	"A"	"G"	"C"	"T"	"T"	"G"	"C"	"C"	"A"

[3,]	"G"	"G"	"G"	"C"	"A"	"G"	"C"	"T"	"T"	"G"	"C"	"C"	"A"
[4,]	"G"	"G"	"G"	"C"	"A"	"G"	"C"	"T"	"T"	"G"	"C"	"C"	"A"
[5,]	"G"	"G"	"G"	"C"	"A"	"G"	"C"	"T"	"T"	"G"	"C"	"C"	"A"
[6,]	"G"	"G"	"G"	"C"	"A"	"G"	"C"	"T"	"T"	"G"	"C"	"C"	"A"
	[,1723]	[,1724]	[,1725]	[,1726]	[,1727]	[,1728]	[,1729]	[,1730]	[,1731]	[,1732]	[,1733]	[,1734]	[,1735]
[1,]	"T"	"G"	"T"	"A"	"C"	"A"	"C"	"C"	"G"	"T"	"G"	"A"	"C"
[2,]	"T"	"G"	"T"	"A"	"C"	"A"	"C"	"C"	"G"	"T"	"C"	"A"	"C"
[3,]	"T"	"G"	"T"	"A"	"C"	"A"	"C"	"C"	"G"	"T"	"G"	"A"	"C"
[4,]	"T"	"G"	"T"	"A"	"C"	"A"	"C"	"T"	"G"	"T"	"G"	"A"	"C"
[5,]	"T"	"G"	"T"	"A"	"C"	"A"	"C"	"C"	"G"	"T"	"G"	"A"	"C"
[6,]	"T"	"G"	"T"	"A"	"C"	"A"	"C"	"C"	"G"	"T"	"G"	"A"	"C"
	[,1736]	[,1737]	[,1738]	[,1739]	[,1740]	[,1741]	[,1742]	[,1743]	[,1744]	[,1745]	[,1746]	[,1747]	[,1748]
[1,]	"T"	"G"	"T"	"C"	"A"	"T"	"T"	"G"	"T"	"T"	"G"	"G"	"C"
[2,]	"T"	"G"	"T"	"C"	"A"	"T"	"T"	"G"	"T"	"T"	"G"	"G"	"C"
[3,]	"T"	"G"	"T"	"C"	"A"	"T"	"T"	"G"	"T"	"T"	"G"	"G"	"C"
[4,]	"T"	"G"	"T"	"C"	"A"	"T"	"T"	"G"	"T"	"T"	"G"	"G"	"C"
[5,]	"T"	"G"	"T"	"C"	"A"	"T"	"T"	"G"	"T"	"T"	"G"	"G"	"C"
[6,]	"T"	"G"	"T"	"C"	"A"	"T"	"T"	"G"	"T"	"T"	"G"	"G"	"C"
	[,1749]	[,1750]	[,1751]	[,1752]	[,1753]	[,1754]	[,1755]	[,1756]	[,1757]	[,1758]	[,1759]	[,1760]	[,1761]
[1,]	"T"	"T"	"A"	"C"	"T"	"C"	"A"	"T"	"T"	"C"	"A"	"C"	"G"
[2,]	"T"	"T"	"A"	"C"	"T"	"C"	"A"	"T"	"T"	"C"	"A"	"C"	"G"
[3,]	"T"	"T"	"A"	"C"	"T"	"C"	"A"	"T"	"T"	"C"	"A"	"C"	"G"
[4,]	"T"	"T"	"A"	"C"	"T"	"C"	"A"	"T"	"T"	"C"	"A"	"C"	"G"
[5,]	"T"	"T"	"A"	"C"	"T"	"C"	"A"	"T"	"T"	"C"	"A"	"C"	"G"
[6,]	"T"	"T"	"A"	"C"	"T"	"C"	"A"	"T"	"T"	"C"	"A"	"C"	"G"
	[,1762]	[,1763]	[,1764]	[,1765]	[,1766]	[,1767]	[,1768]	[,1769]	[,1770]	[,1771]	[,1772]	[,1773]	[,1774]
[1,]	"C"	"A"	"G"	"T"	"C"	"A"	"T"	"C"	"G"	"T"	"C"	"T"	"T"
[2,]	"C"	"A"	"G"	"T"	"C"	"A"	"T"	"C"	"G"	"T"	"C"	"C"	"T"
[3,]	"C"	"A"	"G"	"T"	"C"	"A"	"T"	"C"	"G"	"T"	"C"	"C"	"T"
[4,]	"C"	"A"	"G"	"C"	"C"	"A"	"T"	"C"	"G"	"T"	"C"	"C"	"T"
[5,]	"C"	"A"	"G"	"T"	"C"	"A"	"T"	"C"	"G"	"T"	"C"	"C"	"T"
[6,]	"C"	"A"	"G"	"T"	"C"	"A"	"T"	"C"	"G"	"T"	"C"	"C"	"T"
	[,1775]	[,1776]	[,1777]	[,1778]	[,1779]	[,1780]	[,1781]	[,1782]	[,1783]	[,1784]	[,1785]	[,1786]	[,1787]
[1,]	"G"	"C"	"C"	"A"	"C"	"T"	"C"	"C"	"T"	"C"	"T"	"A"	"C"
[2,]	"G"	"C"	"C"	"A"	"C"	"T"	"C"	"C"	"T"	"C"	"T"	"A"	"C"
[3,]	"G"	"C"	"C"	"A"	"C"	"T"	"C"	"C"	"T"	"C"	"T"	"A"	"C"
[4,]	"G"	"C"	"C"	"A"	"C"	"T"	"C"	"C"	"T"	"C"	"T"	"A"	"C"
[5,]	"G"	"C"	"C"	"A"	"C"	"T"	"C"	"C"	"T"	"C"	"T"	"A"	"C"
[6,]	"G"	"C"	"C"	"A"	"C"	"T"	"C"	"C"	"T"	"C"	"T"	"A"	"C"
	[,1788]	[,1789]	[,1790]	[,1791]	[,1792]	[,1793]	[,1794]	[,1795]	[,1796]	[,1797]	[,1798]	[,1799]	[,1800]
[1,]	"T"	"T"	"C"	"T"	"T"	"G"	"G"	"T"	"A"	"A"	"C"	"A"	"C"
[2,]	"T"	"T"	"C"	"T"	"T"	"G"	"G"	"T"	"A"	"A"	"C"	"A"	"C"
[3,]	"T"	"T"	"C"	"T"	"T"	"G"	"G"	"T"	"A"	"A"	"C"	"A"	"C"
[4,]	"T"	"T"	"C"	"T"	"T"	"G"	"G"	"T"	"A"	"A"	"C"	"A"	"C"
[5,]	"T"	"T"	"C"	"T"	"T"	"G"	"G"	"T"	"A"	"A"	"C"	"A"	"C"
[6,]	"T"	"T"	"C"	"T"	"T"	"G"	"G"	"T"	"A"	"A"	"C"	"A"	"C"
	[,1801]	[,1802]	[,1803]	[,1804]	[,1805]	[,1806]	[,1807]	[,1808]	[,1809]	[,1810]	[,1811]	[,1812]	[,1813]
[1,]	"G"	"G"	"A"	"A"	"A"	"A"	"A"	"C"	"C"	"C"	"T"	"T"	"G"
[2,]	"G"	"G"	"A"	"A"	"A"	"A"	"A"	"C"	"C"	"C"	"T"	"T"	"G"
[3,]	"G"	"G"	"A"	"A"	"A"	"A"	"A"	"C"	"C"	"C"	"T"	"T"	"G"
[4,]	"G"	"G"	"A"	"A"	"A"	"A"	"A"	"C"	"C"	"C"	"T"	"T"	"G"
[5,]	"G"	"G"	"A"	"A"	"A"	"A"	"A"	"C"	"C"	"C"	"T"	"T"	"G"
[6,]	"G"	"G"	"A"	"A"	"A"	"A"	"A"	"C"	"C"	"C"	"T"	"T"	"G"
	[,1814]	[,1815]	[,1816]	[,1817]	[,1818]	[,1819]	[,1820]	[,1821]	[,1822]	[,1823]	[,1824]	[,1825]	[,1826]
[1,]	"G"	"G"	"T"	"T"	"T"	"T"	"T"	"A"	"T"	"T"	"G"	"G"	"A"
[2,]	"G"	"G"	"T"	"T"	"T"	"T"	"T"	"A"	"T"	"T"	"G"	"G"	"A"
[3,]	"G"	"G"	"T"	"T"	"T"	"T"	"T"	"A"	"T"	"T"	"G"	"G"	"A"
[4,]	"G"	"G"	"T"	"T"	"T"	"T"	"T"	"A"	"T"	"T"	"G"	"G"	"A"
[5,]	"G"	"G"	"T"	"T"	"T"	"T"	"T"	"A"	"T"	"T"	"G"	"G"	"A"
[6,]	"G"	"G"	"T"	"T"	"T"	"T"	"T"	"A"	"T"	"T"	"G"	"G"	"A"
	[,1827]	[,1828]	[,1829]	[,1830]	[,1831]	[,1832]	[,1833]	[,1834]	[,1835]	[,1836]	[,1837]	[,1838]	[,1839]
[1,]	"G"	"G"	"G"	"T"	"T"	"G"	"C"	"T"	"G"	"C"	"A"	"A"	"G"
[2,]	"G"	"G"	"G"	"T"	"T"	"G"	"C"	"T"	"G"	"C"	"A"	"A"	"G"
[3,]	"G"	"G"	"G"	"T"	"T"	"G"	"C"	"T"	"G"	"C"	"A"	"A"	"G"
[4,]	"G"	"G"	"G"	"T"	"T"	"G"	"C"	"T"	"G"	"C"	"A"	"A"	"G"
[5,]	"G"	"G"	"G"	"T"	"T"	"G"	"C"	"T"	"G"	"C"	"A"	"A"	"G"
[6,]	"G"	"G"	"G"	"T"	"T"	"G"	"C"	"T"	"G"	"C"	"A"	"A"	"G"
	[,1840]	[,1841]	[,1842]	[,1843]	[,1844]	[,1845]	[,1846]	[,1847]	[,1848]	[,1849]	[,1850]	[,1851]	[,1852]
[1,]	"C"	"A"	"C"	"T"	"C"	"A"	"T"	"C"	"A"	"C"	"C"	"G"	"C"
[2,]	"C"	"A"	"C"	"T"	"C"	"A"	"T"	"C"	"A"	"C"	"C"	"G"	"C"
[3,]	"C"	"A"	"C"	"T"	"C"	"A"	"T"	"C"	"A"	"C"	"C"	"G"	"C"
[4,]	"C"	"A"	"C"	"T"	"C"	"A"	"T"	"C"	"A"	"C"	"C"	"G"	"C"
[5,]	"C"	"A"	"C"	"T"	"C"	"A"	"T"	"C"	"A"	"C"	"C"	"G"	"C"
[6,]	"C"	"A"	"C"	"T"	"C"	"A"	"T"	"C"	"A"	"C"	"C"	"G"	"C"
	[,1853]	[,1854]	[,1855]	[,1856]	[,1857]	[,1858]	[,1859]	[,1860]	[,1861]	[,1862]	[,1863]	[,1864]	[,1865]
[1,]	"T"	"C"	"T"	"G"	"G"	"G"	"G"	"A"	"C"	"C"	"T"	"C"	"T"

[2,]	"T"	"C"	"T"	"G"	"G"	"G"	"G"	"A"	"C"	"C"	"T"	"C"	"T"
[3,]	"T"	"C"	"T"	"G"	"G"	"G"	"G"	"A"	"C"	"C"	"T"	"C"	"T"
[4,]	"T"	"C"	"T"	"G"	"G"	"G"	"G"	"A"	"C"	"C"	"T"	"C"	"T"
[5,]	"T"	"C"	"T"	"G"	"G"	"G"	"G"	"A"	"C"	"C"	"T"	"C"	"T"
[6,]	"T"	"C"	"T"	"G"	"G"	"G"	"G"	"A"	"C"	"C"	"T"	"C"	"T"
	[,1866]	[,1867]	[,1868]	[,1869]	[,1870]	[,1871]	[,1872]	[,1873]	[,1874]	[,1875]	[,1876]	[,1877]	[,1878]
[1,]	"T"	"C"	"A"	"A"	"G"	"T"	"T"	"C"	"T"	"G"	"C"	"C"	"A"
[2,]	"T"	"C"	"A"	"A"	"G"	"T"	"T"	"C"	"T"	"G"	"C"	"C"	"A"
[3,]	"T"	"C"	"A"	"A"	"G"	"T"	"T"	"C"	"T"	"G"	"C"	"C"	"A"
[4,]	"T"	"C"	"A"	"A"	"G"	"T"	"T"	"C"	"T"	"G"	"C"	"C"	"A"
[5,]	"T"	"C"	"A"	"A"	"G"	"T"	"T"	"C"	"T"	"G"	"C"	"C"	"A"
[6,]	"T"	"C"	"A"	"A"	"G"	"T"	"T"	"C"	"T"	"G"	"C"	"C"	"A"
	[,1879]	[,1880]	[,1881]	[,1882]	[,1883]	[,1884]	[,1885]	[,1886]	[,1887]	[,1888]	[,1889]	[,1890]	[,1891]
[1,]	"C"	"C"	"C"	"T"	"A"	"C"	"C"	"C"	"A"	"T"	"C"	"A"	"C"
[2,]	"C"	"C"	"C"	"T"	"A"	"C"	"C"	"C"	"A"	"T"	"C"	"A"	"C"
[3,]	"C"	"C"	"C"	"T"	"A"	"C"	"C"	"C"	"A"	"T"	"C"	"A"	"C"
[4,]	"C"	"C"	"C"	"T"	"A"	"C"	"C"	"C"	"A"	"T"	"C"	"A"	"C"
[5,]	"C"	"C"	"C"	"T"	"A"	"C"	"C"	"C"	"A"	"T"	"C"	"A"	"C"
[6,]	"C"	"C"	"C"	"T"	"A"	"C"	"C"	"C"	"A"	"T"	"C"	"A"	"C"
	[,1892]	[,1893]	[,1894]	[,1895]	[,1896]	[,1897]	[,1898]	[,1899]	[,1900]	[,1901]	[,1902]	[,1903]	[,1904]
[1,]	"C"	"T"	"T"	"C"	"A"	"A"	"G"	"T"	"G"	"C"	"C"	"T"	"G"
[2,]	"C"	"T"	"T"	"C"	"A"	"A"	"G"	"T"	"G"	"C"	"C"	"T"	"G"
[3,]	"C"	"T"	"T"	"C"	"A"	"A"	"G"	"T"	"G"	"C"	"C"	"T"	"G"
[4,]	"C"	"T"	"T"	"C"	"A"	"A"	"G"	"T"	"G"	"C"	"C"	"T"	"G"
[5,]	"C"	"T"	"T"	"C"	"A"	"A"	"G"	"T"	"G"	"C"	"C"	"T"	"G"
[6,]	"C"	"T"	"T"	"C"	"A"	"A"	"G"	"T"	"G"	"C"	"C"	"T"	"G"
	[,1905]	[,1906]	[,1907]	[,1908]	[,1909]	[,1910]	[,1911]	[,1912]	[,1913]	[,1914]	[,1915]	[,1916]	[,1917]
[1,]	"G"	"A"	"A"	"G"	"A"	"G"	"A"	"A"	"C"	"A"	"A"	"T"	"G"
[2,]	"G"	"A"	"A"	"G"	"A"	"G"	"A"	"A"	"C"	"A"	"A"	"T"	"G"
[3,]	"G"	"A"	"A"	"G"	"A"	"G"	"A"	"A"	"C"	"A"	"A"	"T"	"G"
[4,]	"G"	"A"	"A"	"G"	"A"	"G"	"A"	"A"	"C"	"A"	"A"	"T"	"G"
[5,]	"G"	"A"	"A"	"G"	"A"	"G"	"A"	"A"	"C"	"A"	"A"	"T"	"G"
[6,]	"G"	"A"	"A"	"G"	"A"	"G"	"A"	"A"	"C"	"A"	"A"	"T"	"G"
	[,1918]	[,1919]	[,1920]	[,1921]	[,1922]	[,1923]	[,1924]	[,1925]	[,1926]	[,1927]	[,1928]	[,1929]	[,1930]
[1,]	"G"	"C"	"G"	"T"	"G"	"G"	"A"	"C"	"A"	"A"	"G"	"C"	"G"
[2,]	"G"	"C"	"G"	"T"	"G"	"G"	"A"	"C"	"A"	"A"	"G"	"C"	"G"
[3,]	"G"	"C"	"G"	"T"	"G"	"G"	"A"	"C"	"A"	"A"	"G"	"C"	"G"
[4,]	"G"	"C"	"G"	"T"	"G"	"G"	"A"	"C"	"A"	"A"	"G"	"C"	"G"
[5,]	"G"	"C"	"G"	"T"	"G"	"G"	"A"	"C"	"A"	"A"	"G"	"C"	"G"
[6,]	"G"	"C"	"G"	"T"	"G"	"G"	"A"	"C"	"A"	"A"	"G"	"C"	"G"
	[,1931]	[,1932]	[,1933]	[,1934]	[,1935]	[,1936]	[,1937]	[,1938]	[,1939]	[,1940]	[,1941]	[,1942]	[,1943]
[1,]	"C"	"G"	"T"	"C"	"A"	"C"	"C"	"A"	"G"	"A"	"T"	"T"	"C"
[2,]	"C"	"G"	"T"	"C"	"A"	"C"	"C"	"A"	"G"	"A"	"T"	"T"	"C"
[3,]	"C"	"G"	"T"	"C"	"A"	"C"	"C"	"A"	"G"	"A"	"T"	"T"	"C"
[4,]	"C"	"G"	"T"	"C"	"A"	"C"	"C"	"A"	"G"	"A"	"T"	"T"	"C"
[5,]	"C"	"G"	"T"	"C"	"A"	"C"	"C"	"A"	"G"	"A"	"T"	"T"	"C"
[6,]	"C"	"G"	"T"	"C"	"A"	"C"	"C"	"A"	"G"	"A"	"T"	"T"	"C"
	[,1944]	[,1945]	[,1946]	[,1947]	[,1948]	[,1949]	[,1950]	[,1951]	[,1952]	[,1953]	[,1954]	[,1955]	[,1956]
[1,]	"G"	"T"	"G"	"C"	"T"	"C"	"C"	"C"	"C"	"G"	"T"	"A"	"G"
[2,]	"G"	"T"	"G"	"C"	"T"	"T"	"C"	"C"	"C"	"G"	"T"	"A"	"G"
[3,]	"G"	"T"	"G"	"C"	"T"	"T"	"C"	"C"	"C"	"G"	"T"	"A"	"G"
[4,]	"G"	"T"	"G"	"C"	"T"	"T"	"C"	"C"	"C"	"G"	"T"	"A"	"G"
[5,]	"G"	"T"	"G"	"C"	"T"	"T"	"C"	"C"	"C"	"G"	"T"	"A"	"G"
[6,]	"G"	"T"	"G"	"C"	"T"	"T"	"C"	"C"	"C"	"G"	"T"	"A"	"G"
	[,1957]	[,1958]	[,1959]	[,1960]	[,1961]	[,1962]	[,1963]	[,1964]	[,1965]	[,1966]	[,1967]	[,1968]	[,1969]
[1,]	"G"	"A"	"G"	"C"	"C"	"A"	"C"	"C"	"A"	"T"	"T"	"A"	"A"
[2,]	"G"	"A"	"G"	"C"	"C"	"A"	"C"	"C"	"A"	"T"	"T"	"A"	"A"
[3,]	"G"	"A"	"G"	"C"	"C"	"A"	"C"	"C"	"A"	"T"	"T"	"A"	"A"
[4,]	"G"	"A"	"G"	"C"	"C"	"A"	"C"	"C"	"A"	"T"	"T"	"A"	"A"
[5,]	"G"	"A"	"G"	"C"	"C"	"A"	"C"	"C"	"A"	"T"	"T"	"A"	"A"
[6,]	"G"	"A"	"G"	"C"	"C"	"A"	"C"	"C"	"A"	"T"	"T"	"A"	"A"
	[,1970]	[,1971]	[,1972]	[,1973]	[,1974]	[,1975]	[,1976]	[,1977]	[,1978]	[,1979]	[,1980]	[,1981]	[,1982]
[1,]	"C"	"A"	"T"	"G"	"G"	"A"	"T"	"G"	"G"	"G"	"A"	"C"	"T"
[2,]	"C"	"A"	"T"	"G"	"G"	"A"	"T"	"G"	"G"	"G"	"A"	"C"	"T"
[3,]	"C"	"A"	"T"	"G"	"G"	"A"	"T"	"G"	"G"	"G"	"A"	"C"	"T"
[4,]	"C"	"A"	"T"	"G"	"G"	"A"	"T"	"G"	"G"	"G"	"A"	"C"	"T"
[5,]	"C"	"A"	"T"	"G"	"G"	"A"	"T"	"G"	"G"	"G"	"A"	"C"	"T"
[6,]	"C"	"A"	"T"	"G"	"G"	"A"	"T"	"G"	"G"	"G"	"A"	"C"	"T"
	[,1983]	[,1984]	[,1985]	[,1986]	[,1987]	[,1988]	[,1989]	[,1990]	[,1991]	[,1992]	[,1993]	[,1994]	[,1995]
[1,]	"G"	"C"	"C"	"C"	"T"	"C"	"T"	"A"	"T"	"G"	"A"	"G"	"G"
[2,]	"G"	"C"	"C"	"C"	"T"	"C"	"T"	"A"	"T"	"G"	"A"	"G"	"G"
[3,]	"G"	"C"	"C"	"C"	"T"	"C"	"T"	"A"	"T"	"G"	"A"	"G"	"G"
[4,]	"G"	"C"	"C"	"C"	"T"	"C"	"T"	"A"	"T"	"G"	"A"	"G"	"G"
[5,]	"G"	"C"	"C"	"C"	"T"	"C"	"T"	"A"	"T"	"G"	"A"	"G"	"G"
[6,]	"G"	"C"	"C"	"C"	"T"	"C"	"T"	"A"	"T"	"G"	"A"	"G"	"G"
	[,1996]	[,1997]	[,1998]	[,1999]	[,2000]	[,2001]	[,2002]	[,2003]	[,2004]	[,2005]	[,2006]	[,2007]	[,2008]

[1,]	"C"	"T"	"T"	"T"	"G"	"G"	"C"	"T"	"G"	"C"	"C"	"A"	"T"
[2,]	"C"	"T"	"T"	"T"	"G"	"G"	"C"	"T"	"G"	"C"	"C"	"A"	"T"
[3,]	"C"	"T"	"T"	"T"	"G"	"G"	"C"	"T"	"G"	"C"	"C"	"A"	"T"
[4,]	"C"	"T"	"T"	"T"	"G"	"G"	"C"	"T"	"G"	"C"	"C"	"A"	"T"
[5,]	"C"	"T"	"T"	"T"	"G"	"G"	"C"	"T"	"G"	"C"	"C"	"A"	"T"
[6,]	"C"	"T"	"T"	"T"	"G"	"G"	"C"	"T"	"G"	"C"	"C"	"A"	"T"
	[,2009]	[,2010]	[,2011]	[,2012]	[,2013]	[,2014]	[,2015]	[,2016]	[,2017]	[,2018]	[,2019]	[,2020]	[,2021]
[1,]	"T"	"T"	"T"	"C"	"A"	"T"	"T"	"G"	"C"	"T"	"C"	"A"	"A"
[2,]	"T"	"T"	"T"	"C"	"A"	"T"	"T"	"G"	"C"	"T"	"C"	"A"	"A"
[3,]	"T"	"T"	"T"	"C"	"A"	"T"	"T"	"G"	"C"	"T"	"C"	"A"	"A"
[4,]	"T"	"T"	"T"	"C"	"A"	"T"	"T"	"G"	"C"	"T"	"C"	"A"	"A"
[5,]	"T"	"T"	"T"	"C"	"A"	"T"	"T"	"G"	"C"	"T"	"C"	"A"	"A"
[6,]	"T"	"T"	"T"	"C"	"A"	"T"	"T"	"G"	"C"	"T"	"C"	"A"	"A"
	[,2022]	[,2023]	[,2024]	[,2025]	[,2026]	[,2027]	[,2028]	[,2029]	[,2030]	[,2031]	[,2032]	[,2033]	[,2034]
[1,]	"G"	"T"	"A"	"A"	"A"	"C"	"A"	"A"	"C"	"T"	"T"	"T"	"G"
[2,]	"G"	"T"	"T"	"A"	"A"	"C"	"A"	"A"	"C"	"T"	"T"	"T"	"G"
[3,]	"G"	"T"	"A"	"A"	"A"	"C"	"A"	"A"	"C"	"T"	"T"	"T"	"G"
[4,]	"G"	"T"	"A"	"A"	"A"	"C"	"A"	"A"	"C"	"T"	"T"	"T"	"G"
[5,]	"G"	"T"	"T"	"A"	"A"	"C"	"A"	"A"	"C"	"T"	"T"	"T"	"G"
[6,]	"G"	"T"	"A"	"A"	"A"	"C"	"A"	"A"	"C"	"T"	"T"	"T"	"G"
	[,2035]	[,2036]	[,2037]	[,2038]	[,2039]	[,2040]	[,2041]	[,2042]	[,2043]	[,2044]	[,2045]	[,2046]	[,2047]
[1,]	"A"	"A"	"C"	"T"	"G"	"A"	"A"	"C"	"T"	"T"	"C"	"G"	"G"
[2,]	"A"	"A"	"C"	"T"	"G"	"A"	"A"	"C"	"T"	"T"	"C"	"G"	"G"
[3,]	"A"	"A"	"C"	"T"	"G"	"A"	"A"	"C"	"T"	"T"	"C"	"G"	"G"
[4,]	"A"	"A"	"C"	"T"	"G"	"A"	"A"	"C"	"T"	"T"	"C"	"G"	"G"
[5,]	"A"	"A"	"C"	"T"	"G"	"A"	"A"	"C"	"T"	"T"	"C"	"G"	"G"
[6,]	"A"	"A"	"C"	"T"	"G"	"A"	"A"	"C"	"T"	"T"	"C"	"G"	"G"
	[,2048]	[,2049]	[,2050]	[,2051]	[,2052]	[,2053]	[,2054]	[,2055]	[,2056]	[,2057]	[,2058]	[,2059]	[,2060]
[1,]	"A"	"C"	"A"	"A"	"A"	"T"	"T"	"A"	"T"	"T"	"A"	"C"	"A"
[2,]	"A"	"C"	"A"	"A"	"A"	"T"	"T"	"A"	"T"	"T"	"A"	"C"	"A"
[3,]	"A"	"C"	"A"	"A"	"A"	"T"	"T"	"A"	"T"	"T"	"A"	"C"	"A"
[4,]	"A"	"C"	"A"	"G"	"A"	"T"	"T"	"A"	"T"	"T"	"A"	"C"	"A"
[5,]	"A"	"C"	"A"	"A"	"A"	"T"	"T"	"A"	"T"	"T"	"A"	"C"	"A"
[6,]	"A"	"C"	"A"	"A"	"A"	"T"	"T"	"A"	"T"	"T"	"A"	"C"	"A"
	[,2061]	[,2062]	[,2063]	[,2064]	[,2065]	[,2066]	[,2067]	[,2068]	[,2069]	[,2070]	[,2071]	[,2072]	[,2073]
[1,]	"A"	"T"	"C"	"A"	"G"	"C"	"A"	"T"	"C"	"A"	"C"	"A"	"G"
[2,]	"A"	"T"	"C"	"A"	"G"	"C"	"A"	"T"	"C"	"A"	"C"	"A"	"G"
[3,]	"A"	"T"	"C"	"A"	"G"	"C"	"A"	"T"	"C"	"A"	"C"	"A"	"G"
[4,]	"A"	"T"	"C"	"A"	"G"	"C"	"A"	"T"	"C"	"A"	"C"	"A"	"G"
[5,]	"A"	"T"	"C"	"A"	"G"	"C"	"A"	"T"	"C"	"A"	"C"	"A"	"G"
[6,]	"A"	"T"	"C"	"A"	"G"	"C"	"A"	"T"	"C"	"A"	"C"	"A"	"G"
	[,2074]	[,2075]	[,2076]	[,2077]	[,2078]	[,2079]	[,2080]	[,2081]	[,2082]	[,2083]	[,2084]	[,2085]	[,2086]
[1,]	"C"	"C"	"A"	"C"	"A"	"G"	"C"	"T"	"G"	"C"	"C"	"A"	"G"
[2,]	"C"	"C"	"A"	"C"	"A"	"G"	"C"	"T"	"G"	"C"	"C"	"A"	"G"
[3,]	"C"	"C"	"A"	"C"	"A"	"G"	"C"	"T"	"G"	"C"	"C"	"A"	"G"
[4,]	"C"	"C"	"A"	"C"	"G"	"G"	"C"	"T"	"G"	"C"	"C"	"A"	"G"
[5,]	"C"	"C"	"A"	"C"	"A"	"G"	"C"	"T"	"G"	"C"	"C"	"A"	"G"
[6,]	"C"	"C"	"A"	"C"	"A"	"G"	"C"	"T"	"G"	"C"	"C"	"A"	"G"
	[,2087]	[,2088]	[,2089]	[,2090]	[,2091]	[,2092]	[,2093]	[,2094]	[,2095]	[,2096]	[,2097]	[,2098]	[,2099]
[1,]	"T"	"A"	"T"	"T"	"G"	"G"	"G"	"G"	"C"	"A"	"G"	"C"	"T"
[2,]	"T"	"A"	"T"	"T"	"G"	"G"	"G"	"G"	"C"	"A"	"G"	"C"	"T"
[3,]	"T"	"A"	"T"	"T"	"G"	"G"	"G"	"G"	"C"	"A"	"G"	"C"	"T"
[4,]	"T"	"A"	"T"	"T"	"G"	"G"	"G"	"G"	"C"	"A"	"G"	"C"	"T"
[5,]	"C"	"A"	"T"	"T"	"G"	"G"	"G"	"G"	"C"	"A"	"G"	"C"	"T"
[6,]	"T"	"A"	"T"	"T"	"G"	"G"	"G"	"G"	"C"	"A"	"G"	"C"	"T"
	[,2100]	[,2101]	[,2102]	[,2103]	[,2104]	[,2105]	[,2106]	[,2107]	[,2108]	[,2109]	[,2110]	[,2111]	[,2112]
[1,]	"G"	"G"	"A"	"A"	"T"	"T"	"C"	"C"	"T"	"C"	"A"	"G"	"G"
[2,]	"G"	"G"	"A"	"A"	"T"	"T"	"C"	"C"	"T"	"C"	"A"	"G"	"G"
[3,]	"G"	"G"	"A"	"A"	"T"	"T"	"C"	"C"	"T"	"C"	"A"	"G"	"G"
[4,]	"G"	"G"	"A"	"A"	"T"	"T"	"C"	"C"	"T"	"C"	"A"	"G"	"G"
[5,]	"G"	"G"	"A"	"A"	"T"	"T"	"C"	"C"	"T"	"C"	"A"	"G"	"G"
[6,]	"G"	"G"	"A"	"A"	"T"	"T"	"C"	"C"	"T"	"C"	"A"	"G"	"G"
	[,2113]	[,2114]	[,2115]	[,2116]	[,2117]	[,2118]	[,2119]	[,2120]	[,2121]	[,2122]	[,2123]	[,2124]	[,2125]
[1,]	"C"	"G"	"G"	"G"	"C"	"C"	"T"	"G"	"G"	"T"	"C"	"A"	"C"
[2,]	"C"	"G"	"G"	"G"	"C"	"C"	"T"	"G"	"G"	"T"	"C"	"A"	"C"
[3,]	"C"	"G"	"G"	"G"	"C"	"C"	"T"	"G"	"G"	"T"	"C"	"A"	"C"
[4,]	"C"	"G"	"G"	"G"	"C"	"C"	"T"	"G"	"G"	"T"	"C"	"A"	"C"
[5,]	"C"	"G"	"G"	"G"	"C"	"C"	"T"	"G"	"G"	"T"	"C"	"A"	"C"
[6,]	"C"	"G"	"G"	"G"	"C"	"C"	"T"	"G"	"G"	"T"	"C"	"A"	"C"
	[,2126]	[,2127]	[,2128]	[,2129]	[,2130]	[,2131]	[,2132]	[,2133]	[,2134]	[,2135]	[,2136]	[,2137]	[,2138]
[1,]	"T"	"A"	"T"	"G"	"G"	"T"	"C"	"A"	"T"	"T"	"G"	"T"	"G"
[2,]	"T"	"A"	"T"	"G"	"G"	"T"	"C"	"A"	"T"	"T"	"G"	"T"	"G"
[3,]	"T"	"A"	"T"	"G"	"G"	"T"	"C"	"A"	"T"	"T"	"G"	"T"	"G"
[4,]	"T"	"A"	"T"	"G"	"G"	"T"	"C"	"A"	"T"	"T"	"G"	"T"	"G"
[5,]	"T"	"A"	"T"	"G"	"G"	"T"	"C"	"A"	"T"	"T"	"G"	"T"	"G"
[6,]	"T"	"A"	"T"	"G"	"G"	"T"	"C"	"A"	"T"	"T"	"G"	"T"	"G"

	[,2139]	[,2140]	[,2141]	[,2142]	[,2143]	[,2144]	[,2145]	[,2146]	[,2147]	[,2148]	[,2149]	[,2150]	[,2151]
[1,]	"C"	"T"	"G"	"A"	"C"	"A"	"T"	"C"	"T"	"G"	"T"	"C"	"G"
[2,]	"C"	"T"	"G"	"A"	"C"	"A"	"T"	"C"	"T"	"G"	"T"	"C"	"G"
[3,]	"C"	"T"	"G"	"A"	"C"	"A"	"T"	"C"	"T"	"G"	"T"	"C"	"G"
[4,]	"C"	"T"	"G"	"A"	"C"	"A"	"T"	"C"	"T"	"G"	"T"	"C"	"G"
[5,]	"C"	"T"	"G"	"A"	"C"	"A"	"T"	"C"	"T"	"G"	"T"	"C"	"G"
[6,]	"C"	"T"	"G"	"A"	"C"	"A"	"T"	"C"	"T"	"G"	"T"	"C"	"G"
	[,2152]	[,2153]	[,2154]	[,2155]	[,2156]	[,2157]	[,2158]	[,2159]	[,2160]	[,2161]	[,2162]	[,2163]	[,2164]
[1,]	"G"	"C"	"C"	"T"	"G"	"C"	"C"	"C"	"A"	"C"	"T"	"G"	"A"
[2,]	"G"	"C"	"C"	"T"	"G"	"C"	"C"	"C"	"A"	"C"	"T"	"G"	"A"
[3,]	"G"	"C"	"C"	"T"	"G"	"C"	"C"	"C"	"A"	"C"	"T"	"G"	"A"
[4,]	"G"	"C"	"C"	"T"	"G"	"C"	"C"	"C"	"A"	"C"	"T"	"G"	"A"
[5,]	"G"	"C"	"C"	"T"	"G"	"C"	"C"	"C"	"A"	"C"	"T"	"G"	"A"
[6,]	"G"	"C"	"C"	"T"	"G"	"C"	"C"	"C"	"A"	"C"	"T"	"G"	"A"
	[,2165]	[,2166]	[,2167]	[,2168]	[,2169]	[,2170]	[,2171]	[,2172]	[,2173]	[,2174]	[,2175]	[,2176]	[,2177]
[1,]	"C"	"G"	"A"	"C"	"A"	"T"	"C"	"A"	"C"	"G"	"C"	"T"	"C"
[2,]	"C"	"G"	"A"	"C"	"A"	"T"	"C"	"A"	"C"	"G"	"C"	"T"	"C"
[3,]	"C"	"G"	"A"	"C"	"A"	"T"	"C"	"A"	"C"	"G"	"C"	"T"	"C"
[4,]	"C"	"G"	"A"	"C"	"A"	"T"	"C"	"A"	"C"	"G"	"C"	"T"	"C"
[5,]	"C"	"G"	"A"	"C"	"A"	"T"	"C"	"A"	"C"	"G"	"C"	"T"	"C"
[6,]	"C"	"G"	"A"	"C"	"A"	"T"	"C"	"A"	"C"	"G"	"C"	"T"	"C"
	[,2178]	[,2179]	[,2180]	[,2181]	[,2182]	[,2183]	[,2184]	[,2185]	[,2186]	[,2187]	[,2188]	[,2189]	[,2190]
[1,]	"A"	"T"	"C"	"A"	"T"	"C"	"G"	"C"	"G"	"G"	"T"	"G"	"G"
[2,]	"A"	"T"	"C"	"A"	"T"	"C"	"G"	"C"	"G"	"G"	"T"	"G"	"G"
[3,]	"A"	"T"	"C"	"A"	"T"	"C"	"G"	"C"	"G"	"G"	"T"	"G"	"G"
[4,]	"A"	"T"	"C"	"A"	"T"	"C"	"G"	"C"	"G"	"G"	"T"	"G"	"G"
[5,]	"A"	"T"	"C"	"A"	"T"	"C"	"G"	"C"	"A"	"G"	"T"	"G"	"G"
[6,]	"A"	"T"	"C"	"A"	"T"	"C"	"G"	"C"	"G"	"G"	"T"	"G"	"G"
	[,2191]	[,2192]	[,2193]	[,2194]	[,2195]	[,2196]	[,2197]	[,2198]	[,2199]	[,2200]	[,2201]	[,2202]	[,2203]
[1,]	"A"	"C"	"T"	"G"	"G"	"T"	"T"	"C"	"C"	"T"	"G"	"G"	"A"
[2,]	"A"	"C"	"T"	"G"	"G"	"T"	"T"	"C"	"C"	"T"	"G"	"G"	"A"
[3,]	"A"	"C"	"T"	"G"	"G"	"T"	"T"	"C"	"C"	"T"	"G"	"G"	"A"
[4,]	"A"	"C"	"T"	"G"	"G"	"T"	"T"	"C"	"C"	"T"	"G"	"G"	"A"
[5,]	"A"	"C"	"T"	"G"	"G"	"T"	"T"	"C"	"C"	"T"	"G"	"G"	"A"
[6,]	"A"	"C"	"T"	"G"	"G"	"T"	"T"	"C"	"C"	"T"	"G"	"G"	"A"
	[,2204]	[,2205]	[,2206]	[,2207]	[,2208]	[,2209]	[,2210]	[,2211]	[,2212]	[,2213]	[,2214]	[,2215]	[,2216]
[1,]	"T"	"C"	"G"	"C"	"C"	"T"	"C"	"C"	"G"	"G"	"A"	"C"	"C"
[2,]	"T"	"C"	"G"	"C"	"C"	"T"	"C"	"C"	"G"	"G"	"A"	"C"	"C"
[3,]	"T"	"C"	"G"	"C"	"C"	"T"	"C"	"C"	"G"	"G"	"A"	"C"	"C"
[4,]	"T"	"C"	"G"	"C"	"C"	"T"	"C"	"C"	"G"	"G"	"A"	"C"	"C"
[5,]	"T"	"C"	"G"	"C"	"C"	"T"	"C"	"C"	"G"	"G"	"A"	"C"	"C"
[6,]	"T"	"C"	"G"	"C"	"C"	"T"	"C"	"C"	"G"	"G"	"A"	"C"	"C"
	[,2217]	[,2218]	[,2219]	[,2220]	[,2221]	[,2222]	[,2223]	[,2224]	[,2225]	[,2226]	[,2227]	[,2228]	[,2229]
[1,]	"A"	"C"	"A"	"C"	"C"	"A"	"A"	"C"	"G"	"T"	"A"	"C"	"C"
[2,]	"A"	"C"	"A"	"C"	"C"	"A"	"A"	"C"	"G"	"T"	"A"	"C"	"C"
[3,]	"A"	"C"	"A"	"C"	"C"	"A"	"A"	"C"	"G"	"T"	"A"	"C"	"C"
[4,]	"A"	"C"	"A"	"C"	"C"	"A"	"A"	"C"	"G"	"T"	"A"	"C"	"C"
[5,]	"A"	"C"	"A"	"C"	"C"	"A"	"A"	"C"	"G"	"T"	"A"	"C"	"C"
[6,]	"A"	"C"	"A"	"C"	"C"	"A"	"A"	"C"	"G"	"T"	"A"	"C"	"C"
	[,2230]	[,2231]	[,2232]	[,2233]	[,2234]	[,2235]	[,2236]	[,2237]	[,2238]	[,2239]	[,2240]	[,2241]	[,2242]
[1,]	"T"	"G"	"G"	"A"	"G"	"A"	"C"	"T"	"C"	"C"	"C"	"C"	"T"
[2,]	"T"	"G"	"G"	"A"	"G"	"A"	"C"	"T"	"C"	"C"	"C"	"C"	"T"
[3,]	"T"	"G"	"G"	"A"	"G"	"A"	"C"	"T"	"C"	"C"	"C"	"C"	"T"
[4,]	"T"	"G"	"G"	"A"	"G"	"A"	"C"	"T"	"C"	"C"	"C"	"C"	"T"
[5,]	"T"	"G"	"G"	"A"	"G"	"A"	"C"	"T"	"C"	"C"	"C"	"C"	"T"
[6,]	"T"	"G"	"G"	"A"	"G"	"A"	"C"	"T"	"C"	"C"	"C"	"C"	"T"
	[,2243]	[,2244]	[,2245]	[,2246]	[,2247]	[,2248]	[,2249]	[,2250]	[,2251]	[,2252]	[,2253]	[,2254]	[,2255]
[1,]	"G"	"G"	"A"	"G"	"C"	"T"	"G"	"G"	"G"	"G"	"A"	"T"	"T"
[2,]	"G"	"G"	"A"	"G"	"C"	"T"	"G"	"G"	"G"	"G"	"A"	"T"	"T"
[3,]	"G"	"G"	"A"	"G"	"C"	"T"	"G"	"G"	"G"	"G"	"A"	"T"	"T"
[4,]	"G"	"G"	"A"	"G"	"C"	"T"	"G"	"G"	"G"	"G"	"A"	"T"	"T"
[5,]	"G"	"G"	"A"	"G"	"C"	"T"	"G"	"G"	"G"	"G"	"A"	"T"	"T"
[6,]	"G"	"G"	"A"	"G"	"C"	"T"	"G"	"G"	"G"	"G"	"A"	"T"	"T"
	[,2256]	[,2257]	[,2258]	[,2259]	[,2260]	[,2261]	[,2262]	[,2263]	[,2264]	[,2265]	[,2266]	[,2267]	[,2268]
[1,]	"G"	"T"	"G"	"G"	"A"	"G"	"C"	"A"	"C"	"T"	"T"	"G"	"T"
[2,]	"G"	"T"	"G"	"G"	"A"	"G"	"C"	"A"	"C"	"T"	"T"	"G"	"T"
[3,]	"G"	"T"	"G"	"G"	"A"	"G"	"C"	"A"	"C"	"T"	"T"	"G"	"T"
[4,]	"G"	"T"	"G"	"G"	"A"	"G"	"C"	"A"	"C"	"T"	"T"	"G"	"T"
[5,]	"G"	"T"	"G"	"G"	"A"	"G"	"C"	"A"	"C"	"T"	"T"	"G"	"T"
[6,]	"G"	"T"	"G"	"G"	"A"	"G"	"C"	"A"	"C"	"T"	"T"	"G"	"T"
	[,2269]	[,2270]	[,2271]	[,2272]	[,2273]	[,2274]	[,2275]	[,2276]	[,2277]	[,2278]	[,2279]	[,2280]	[,2281]
[1,]	"C"	"A"	"G"	"A"	"C"	"A"	"T"	"G"	"A"	"A"	"C"	"T"	"T"
[2,]	"C"	"A"	"G"	"A"	"C"	"A"	"T"	"G"	"A"	"A"	"C"	"T"	"T"
[3,]	"C"	"A"	"G"	"A"	"C"	"A"	"T"	"G"	"A"	"A"	"C"	"T"	"T"
[4,]	"C"	"A"	"G"	"A"	"C"	"A"	"T"	"G"	"A"	"A"	"C"	"T"	"T"
[5,]	"C"	"A"	"G"	"A"	"C"	"A"	"T"	"G"	"A"	"A"	"C"	"T"	"T"



[6,]	"C"	"A"	"C"	"G"	"A"	"C"	"A"	"T"	"G"	"A"	"A"	"C"	"T"
	[,2282]	[,2283]	[,2284]	[,2285]	[,2286]	[,2287]	[,2288]	[,2289]	[,2290]	[,2291]	[,2292]	[,2293]	[,2294]
[1,]	"G"	"A"	"A"	"G"	"A"	"A"	"C"	"A"	"G"	"A"	"G"	"A"	"T"
[2,]	"G"	"A"	"A"	"G"	"A"	"A"	"C"	"A"	"G"	"A"	"G"	"A"	"T"
[3,]	"G"	"A"	"A"	"G"	"A"	"A"	"C"	"A"	"G"	"A"	"G"	"A"	"T"
[4,]	"G"	"A"	"A"	"G"	"A"	"A"	"C"	"A"	"G"	"A"	"G"	"A"	"T"
[5,]	"G"	"A"	"A"	"G"	"A"	"A"	"C"	"A"	"G"	"A"	"G"	"A"	"T"
[6,]	"G"	"A"	"A"	"G"	"A"	"A"	"C"	"A"	"G"	"A"	"G"	"A"	"T"
	[,2295]	[,2296]	[,2297]	[,2298]	[,2299]	[,2300]	[,2301]	[,2302]	[,2303]	[,2304]	[,2305]	[,2306]	[,2307]
[1,]	"G"	"T"	"T"	"G"	"A"	"A"	"A"	"T"	"G"	"G"	"G"	"T"	"A"
[2,]	"G"	"T"	"T"	"G"	"A"	"A"	"A"	"T"	"G"	"G"	"G"	"T"	"A"
[3,]	"G"	"T"	"T"	"G"	"A"	"A"	"A"	"T"	"G"	"G"	"G"	"T"	"A"
[4,]	"G"	"T"	"T"	"G"	"A"	"A"	"A"	"T"	"G"	"G"	"G"	"T"	"A"
[5,]	"G"	"C"	"T"	"G"	"A"	"A"	"A"	"T"	"G"	"G"	"G"	"T"	"A"
[6,]	"G"	"T"	"T"	"G"	"A"	"A"	"A"	"T"	"G"	"G"	"G"	"T"	"A"
	[,2308]	[,2309]	[,2310]	[,2311]	[,2312]	[,2313]	[,2314]	[,2315]	[,2316]	[,2317]	[,2318]	[,2319]	[,2320]
[1,]	"A"	"C"	"T"	"C"	"A"	"G"	"T"	"G"	"A"	"T"	"T"	"G"	"A"
[2,]	"A"	"C"	"T"	"C"	"A"	"G"	"T"	"G"	"A"	"T"	"T"	"G"	"A"
[3,]	"A"	"C"	"T"	"C"	"A"	"G"	"T"	"G"	"A"	"T"	"T"	"G"	"A"
[4,]	"A"	"C"	"T"	"C"	"A"	"G"	"T"	"G"	"A"	"T"	"T"	"G"	"A"
[5,]	"A"	"C"	"T"	"C"	"A"	"G"	"T"	"G"	"A"	"T"	"T"	"G"	"A"
[6,]	"A"	"C"	"T"	"C"	"A"	"G"	"T"	"G"	"A"	"T"	"T"	"G"	"A"
	[,2321]	[,2322]	[,2323]	[,2324]	[,2325]	[,2326]	[,2327]	[,2328]	[,2329]	[,2330]	[,2331]	[,2332]	[,2333]
[1,]	"A"	"G"	"A"	"G"	"A"	"A"	"T"	"G"	"A"	"A"	"A"	"T"	"G"
[2,]	"A"	"G"	"A"	"G"	"A"	"A"	"T"	"G"	"A"	"A"	"A"	"T"	"G"
[3,]	"A"	"G"	"A"	"G"	"A"	"A"	"T"	"G"	"A"	"A"	"A"	"T"	"G"
[4,]	"A"	"G"	"A"	"G"	"A"	"A"	"T"	"G"	"A"	"A"	"A"	"T"	"G"
[5,]	"A"	"G"	"A"	"G"	"A"	"A"	"T"	"G"	"A"	"A"	"A"	"T"	"G"
[6,]	"A"	"G"	"A"	"G"	"A"	"A"	"T"	"G"	"A"	"A"	"A"	"T"	"G"
	[,2334]	[,2335]	[,2336]	[,2337]	[,2338]	[,2339]	[,2340]	[,2341]	[,2342]	[,2343]	[,2344]	[,2345]	[,2346]
[1,]	"A"	"A"	"G"	"A"	"A"	"A"	"C"	"C"	"A"	"T"	"A"	"T"	"C"
[2,]	"A"	"A"	"G"	"A"	"A"	"A"	"C"	"C"	"A"	"T"	"A"	"T"	"C"
[3,]	"A"	"A"	"G"	"A"	"A"	"A"	"C"	"C"	"A"	"T"	"A"	"T"	"C"
[4,]	"A"	"A"	"G"	"A"	"A"	"A"	"C"	"C"	"T"	"T"	"A"	"T"	"C"
[5,]	"A"	"A"	"G"	"A"	"A"	"A"	"C"	"C"	"A"	"T"	"A"	"T"	"C"
[6,]	"A"	"A"	"G"	"A"	"A"	"A"	"C"	"C"	"A"	"T"	"A"	"T"	"C"
	[,2347]	[,2348]	[,2349]	[,2350]	[,2351]	[,2352]	[,2353]	[,2354]	[,2355]	[,2356]	[,2357]	[,2358]	[,2359]
[1,]	"A"	"A"	"C"	"T"	"G"	"A"	"T"	"T"	"G"	"C"	"A"	"C"	"A"
[2,]	"A"	"A"	"C"	"T"	"G"	"A"	"T"	"T"	"G"	"C"	"A"	"C"	"A"
[3,]	"A"	"A"	"C"	"T"	"G"	"A"	"T"	"T"	"G"	"C"	"A"	"C"	"A"
[4,]	"A"	"A"	"C"	"T"	"G"	"A"	"T"	"T"	"G"	"C"	"A"	"C"	"A"
[5,]	"A"	"A"	"C"	"T"	"G"	"A"	"T"	"T"	"G"	"C"	"A"	"C"	"A"
[6,]	"A"	"A"	"C"	"T"	"G"	"A"	"T"	"T"	"G"	"C"	"A"	"C"	"A"
	[,2360]	[,2361]	[,2362]	[,2363]	[,2364]	[,2365]	[,2366]	[,2367]	[,2368]	[,2369]	[,2370]	[,2371]	[,2372]
[1,]	"G"	"G"	"A"	"C"	"A"	"A"	"T"	"G"	"A"	"A"	"A"	"C"	"T"
[2,]	"G"	"G"	"A"	"C"	"A"	"A"	"T"	"G"	"A"	"A"	"A"	"C"	"T"
[3,]	"G"	"G"	"A"	"C"	"A"	"A"	"T"	"G"	"A"	"A"	"A"	"C"	"T"
[4,]	"G"	"G"	"A"	"C"	"A"	"A"	"T"	"G"	"A"	"A"	"A"	"C"	"T"
[5,]	"G"	"G"	"A"	"C"	"A"	"A"	"T"	"G"	"A"	"A"	"A"	"C"	"T"
[6,]	"G"	"G"	"A"	"C"	"A"	"A"	"T"	"G"	"A"	"A"	"A"	"C"	"T"
	[,2373]	[,2374]	[,2375]	[,2376]	[,2377]	[,2378]	[,2379]	[,2380]	[,2381]	[,2382]	[,2383]	[,2384]	[,2385]
[1,]	"G"	"A"	"G"	"A"	"A"	"A"	"C"	"C"	"C"	"A"	"T"	"C"	"G"
[2,]	"G"	"A"	"G"	"A"	"A"	"A"	"C"	"C"	"C"	"A"	"T"	"C"	"G"
[3,]	"G"	"A"	"G"	"A"	"A"	"A"	"C"	"C"	"C"	"A"	"T"	"C"	"G"
[4,]	"G"	"A"	"G"	"A"	"A"	"A"	"C"	"C"	"C"	"G"	"T"	"C"	"G"
[5,]	"G"	"A"	"G"	"A"	"A"	"A"	"C"	"C"	"C"	"A"	"T"	"C"	"G"
[6,]	"G"	"A"	"G"	"A"	"A"	"A"	"C"	"C"	"C"	"A"	"T"	"C"	"G"
	[,2386]	[,2387]	[,2388]	[,2389]	[,2390]	[,2391]	[,2392]	[,2393]	[,2394]	[,2395]	[,2396]	[,2397]	[,2398]
[1,]	"A"	"C"	"A"	"G"	"T"	"G"	"A"	"A"	"A"	"C"	"C"	"A"	"A"
[2,]	"A"	"C"	"A"	"G"	"T"	"G"	"A"	"A"	"A"	"C"	"C"	"A"	"A"
[3,]	"A"	"C"	"A"	"G"	"T"	"G"	"A"	"A"	"A"	"C"	"C"	"A"	"A"
[4,]	"A"	"C"	"A"	"G"	"T"	"G"	"A"	"A"	"A"	"C"	"C"	"A"	"A"
[5,]	"A"	"C"	"A"	"G"	"T"	"G"	"A"	"A"	"A"	"C"	"C"	"A"	"A"
[6,]	"A"	"C"	"A"	"G"	"T"	"G"	"A"	"A"	"A"	"C"	"C"	"A"	"A"
	[,2399]	[,2400]	[,2401]	[,2402]	[,2403]	[,2404]	[,2405]	[,2406]	[,2407]	[,2408]	[,2409]	[,2410]	[,2411]
[1,]	"G"	"A"	"T"	"G"	"T"	"A"	"G"	"A"	"C"	"T"	"A"	"A"	"C"
[2,]	"G"	"A"	"T"	"G"	"T"	"A"	"G"	"A"	"C"	"T"	"A"	"A"	"C"
[3,]	"G"	"A"	"T"	"G"	"T"	"A"	"G"	"A"	"C"	"T"	"A"	"A"	"C"
[4,]	"G"	"A"	"T"	"G"	"T"	"A"	"G"	"A"	"C"	"T"	"A"	"A"	"C"
[5,]	"G"	"A"	"T"	"G"	"T"	"A"	"G"	"A"	"C"	"T"	"A"	"A"	"C"
[6,]	"G"	"A"	"T"	"G"	"T"	"A"	"G"	"A"	"C"	"T"	"A"	"A"	"C"
	[,2412]	[,2413]	[,2414]	[,2415]	[,2416]	[,2417]	[,2418]	[,2419]	[,2420]	[,2421]	[,2422]	[,2423]	[,2424]
[1,]	"A"	"T"	"A"	"A"	"A"	"G"	"A"	"A"	"A"	"C"	"A"	"C"	"T"
[2,]	"A"	"T"	"A"	"A"	"A"	"G"	"A"	"A"	"A"	"C"	"A"	"C"	"T"
[3,]	"A"	"T"	"A"	"A"	"A"	"G"	"A"	"A"	"A"	"C"	"A"	"C"	"T"
[4,]	"A"	"T"	"A"	"A"	"A"	"G"	"A"	"A"	"A"	"C"	"G"	"C"	"T"

[5,]	"A"	"T"	"A"	"A"	"A"	"G"	"A"	"A"	"A"	"T"	"G"	"C"	"T"
[6,]	"A"	"T"	"G"	"A"	"A"	"G"	"A"	"A"	"A"	"C"	"A"	"C"	"T"
	[,2425]	[,2426]	[,2427]	[,2428]	[,2429]	[,2430]	[,2431]	[,2432]	[,2433]	[,2434]	[,2435]	[,2436]	[,2437]
[1,]	"T"	"T"	"C"	"T"	"T"	"G"	"A"	"G"	"C"	"A"	"C"	"C"	"A"
[2,]	"T"	"T"	"C"	"T"	"T"	"G"	"A"	"G"	"C"	"A"	"C"	"C"	"A"
[3,]	"T"	"T"	"C"	"T"	"T"	"G"	"A"	"G"	"C"	"A"	"C"	"C"	"A"
[4,]	"T"	"T"	"C"	"T"	"T"	"G"	"A"	"G"	"C"	"A"	"C"	"C"	"A"
[5,]	"T"	"T"	"C"	"T"	"T"	"G"	"A"	"G"	"C"	"A"	"C"	"C"	"A"
[6,]	"T"	"T"	"C"	"T"	"T"	"G"	"A"	"G"	"C"	"A"	"C"	"C"	"A"
	[,2438]	[,2439]	[,2440]	[,2441]	[,2442]	[,2443]	[,2444]	[,2445]	[,2446]	[,2447]	[,2448]	[,2449]	[,2450]
[1,]	"G"	"G"	"T"	"G"	"T"	"T"	"A"	"A"	"A"	"A"	"A"	"C"	"C"
[2,]	"G"	"G"	"T"	"G"	"T"	"T"	"A"	"A"	"A"	"A"	"A"	"C"	"C"
[3,]	"G"	"G"	"T"	"G"	"T"	"T"	"A"	"A"	"A"	"A"	"A"	"C"	"C"
[4,]	"G"	"G"	"T"	"G"	"T"	"T"	"A"	"A"	"A"	"A"	"A"	"C"	"C"
[5,]	"G"	"G"	"T"	"G"	"T"	"T"	"A"	"A"	"A"	"A"	"A"	"C"	"C"
[6,]	"G"	"G"	"T"	"G"	"T"	"T"	"A"	"A"	"A"	"A"	"A"	"C"	"C"
	[,2451]	[,2452]	[,2453]	[,2454]	[,2455]	[,2456]	[,2457]	[,2458]	[,2459]	[,2460]	[,2461]	[,2462]	[,2463]
[1,]	"A"	"T"	"T"	"A"	"T"	"A"	"A"	"A"	"A"	"T"	"C"	"T"	"T"
[2,]	"A"	"T"	"T"	"A"	"T"	"A"	"A"	"A"	"A"	"T"	"C"	"T"	"T"
[3,]	"A"	"T"	"T"	"A"	"T"	"A"	"A"	"A"	"A"	"T"	"C"	"T"	"T"
[4,]	"A"	"T"	"T"	"A"	"T"	"A"	"A"	"A"	"A"	"T"	"C"	"T"	"T"
[5,]	"A"	"T"	"T"	"A"	"T"	"A"	"A"	"A"	"A"	"T"	"C"	"T"	"T"
[6,]	"A"	"T"	"T"	"A"	"T"	"A"	"A"	"A"	"A"	"T"	"C"	"T"	"T"
	[,2464]	[,2465]	[,2466]	[,2467]	[,2468]	[,2469]	[,2470]	[,2471]	[,2472]	[,2473]	[,2474]	[,2475]	[,2476]
[1,]	"T"	"C"	"C"	"A"	"T"	"C"	"T"	"C"	"A"	"T"	"T"	"A"	"C"
[2,]	"T"	"C"	"C"	"A"	"T"	"C"	"T"	"C"	"A"	"T"	"T"	"A"	"C"
[3,]	"T"	"C"	"C"	"A"	"T"	"C"	"T"	"C"	"A"	"T"	"T"	"A"	"C"
[4,]	"T"	"C"	"C"	"A"	"T"	"C"	"T"	"C"	"G"	"T"	"T"	"A"	"C"
[5,]	"T"	"C"	"C"	"A"	"T"	"C"	"T"	"C"	"A"	"T"	"T"	"A"	"C"
[6,]	"T"	"C"	"C"	"A"	"T"	"C"	"T"	"C"	"A"	"T"	"T"	"A"	"C"
	[,2477]	[,2478]	[,2479]	[,2480]	[,2481]	[,2482]	[,2483]	[,2484]	[,2485]	[,2486]	[,2487]	[,2488]	[,2489]
[1,]	"A"	"G"	"C"	"T"	"C"	"A"	"T"	"T"	"C"	"G"	"C"	"T"	"C"
[2,]	"A"	"G"	"C"	"T"	"C"	"A"	"T"	"T"	"C"	"G"	"C"	"T"	"C"
[3,]	"A"	"G"	"C"	"T"	"C"	"A"	"T"	"T"	"C"	"G"	"C"	"T"	"C"
[4,]	"A"	"G"	"C"	"T"	"C"	"A"	"T"	"T"	"C"	"T"	"C"	"T"	"C"
[5,]	"A"	"G"	"C"	"T"	"C"	"A"	"T"	"T"	"C"	"G"	"C"	"T"	"C"
[6,]	"A"	"G"	"C"	"T"	"C"	"A"	"T"	"T"	"C"	"G"	"C"	"T"	"C"
	[,2490]	[,2491]	[,2492]	[,2493]	[,2494]	[,2495]	[,2496]	[,2497]	[,2498]	[,2499]	[,2500]	[,2501]	[,2502]
[1,]	"C"	"A"	"G"	"C"	"A"	"A"	"G"	"C"	"C"	"C"	"G"	"T"	"C"
[2,]	"C"	"A"	"G"	"C"	"A"	"A"	"G"	"C"	"C"	"C"	"G"	"T"	"T"
[3,]	"C"	"A"	"G"	"C"	"A"	"A"	"G"	"C"	"C"	"C"	"G"	"T"	"T"
[4,]	"C"	"A"	"G"	"C"	"A"	"A"	"G"	"C"	"C"	"C"	"G"	"T"	"T"
[5,]	"C"	"A"	"G"	"C"	"A"	"A"	"G"	"C"	"C"	"C"	"G"	"T"	"T"
[6,]	"C"	"A"	"G"	"C"	"A"	"A"	"G"	"C"	"C"	"C"	"G"	"T"	"T"
	[,2503]	[,2504]	[,2505]	[,2506]	[,2507]	[,2508]	[,2509]	[,2510]	[,2511]	[,2512]	[,2513]	[,2514]	[,2515]
[1,]	"A"	"T"	"C"	"T"	"T"	"C"	"C"	"C"	"T"	"T"	"T"	"C"	"C"
[2,]	"A"	"T"	"C"	"T"	"T"	"C"	"C"	"C"	"T"	"T"	"T"	"C"	"C"
[3,]	"A"	"T"	"C"	"T"	"T"	"C"	"C"	"C"	"T"	"T"	"T"	"C"	"C"
[4,]	"A"	"T"	"C"	"T"	"T"	"C"	"C"	"C"	"T"	"T"	"T"	"C"	"C"
[5,]	"A"	"T"	"C"	"T"	"T"	"C"	"C"	"C"	"T"	"T"	"T"	"C"	"C"
[6,]	"A"	"T"	"C"	"T"	"T"	"C"	"C"	"C"	"T"	"T"	"T"	"C"	"C"
	[,2516]	[,2517]	[,2518]	[,2519]	[,2520]	[,2521]	[,2522]	[,2523]	[,2524]	[,2525]	[,2526]	[,2527]	[,2528]
[1,]	"T"	"C"	"C"	"C"	"T"	"T"	"C"	"T"	"G"	"A"	"T"	"A"	"A"
[2,]	"T"	"C"	"C"	"C"	"T"	"T"	"C"	"T"	"G"	"A"	"T"	"A"	"A"
[3,]	"T"	"C"	"C"	"C"	"T"	"T"	"C"	"T"	"G"	"A"	"T"	"A"	"A"
[4,]	"T"	"C"	"C"	"C"	"T"	"T"	"C"	"T"	"G"	"A"	"T"	"A"	"A"
[5,]	"T"	"C"	"C"	"C"	"T"	"T"	"C"	"T"	"G"	"A"	"T"	"A"	"A"
[6,]	"T"	"C"	"C"	"C"	"T"	"T"	"C"	"T"	"G"	"A"	"T"	"A"	"A"
	[,2529]	[,2530]	[,2531]	[,2532]	[,2533]	[,2534]	[,2535]	[,2536]	[,2537]	[,2538]	[,2539]	[,2540]	[,2541]
[1,]	"G"	"A"	"C"	"T"	"G"	"G"	"A"	"A"	"A"	"A"	"T"	"A"	"G"
[2,]	"G"	"A"	"C"	"T"	"G"	"G"	"A"	"A"	"A"	"G"	"T"	"A"	"G"
[3,]	"G"	"A"	"C"	"T"	"G"	"G"	"A"	"A"	"A"	"G"	"T"	"A"	"G"
[4,]	"G"	"A"	"C"	"T"	"G"	"G"	"A"	"A"	"A"	"G"	"T"	"A"	"G"
[5,]	"G"	"A"	"C"	"T"	"G"	"G"	"A"	"A"	"A"	"G"	"T"	"A"	"A"
[6,]	"G"	"A"	"C"	"T"	"G"	"G"	"A"	"A"	"A"	"G"	"T"	"A"	"G"
	[,2542]	[,2543]	[,2544]	[,2545]	[,2546]	[,2547]	[,2548]	[,2549]	[,2550]	[,2551]	[,2552]	[,2553]	[,2554]
[1,]	"T"	"C"	"C"	"T"	"C"	"C"	"A"	"A"	"A"	"A"	"C"	"A"	"C"
[2,]	"T"	"C"	"C"	"T"	"C"	"C"	"A"	"A"	"A"	"A"	"C"	"A"	"C"
[3,]	"T"	"C"	"C"	"T"	"C"	"C"	"A"	"A"	"A"	"A"	"C"	"A"	"C"
[4,]	"T"	"C"	"C"	"T"	"C"	"C"	"A"	"A"	"A"	"A"	"A"	"A"	"C"
[5,]	"T"	"C"	"C"	"T"	"C"	"C"	"A"	"A"	"A"	"A"	"A"	"A"	"C"
[6,]	"T"	"C"	"C"	"T"	"C"	"C"	"A"	"A"	"A"	"A"	"A"	"A"	"C"
	[,2555]	[,2556]	[,2557]	[,2558]	[,2559]	[,2560]	[,2561]	[,2562]	[,2563]	[,2564]	[,2565]	[,2566]	[,2567]
[1,]	"A"	"A"	"G"	"G"	"G"	"A"	"G"	"G"	"A"	"T"	"T"	"T"	"T"
[2,]	"A"	"A"	"G"	"G"	"G"	"A"	"G"	"G"	"A"	"T"	"T"	"T"	"T"
[3,]	"A"	"A"	"G"	"G"	"G"	"A"	"G"	"G"	"A"	"T"	"T"	"T"	"T"

[4,]	"A"	"A"	"G"	"G"	"G"	"A"	"G"	"G"	"A"	"T"	"T"	"T"	"T"
[5,]	"A"	"A"	"G"	"G"	"G"	"A"	"G"	"G"	"A"	"T"	"T"	"T"	"T"
[6,]	"A"	"A"	"G"	"G"	"G"	"A"	"G"	"G"	"A"	"T"	"T"	"T"	"T"
	[,2568]	[,2569]	[,2570]	[,2571]	[,2572]	[,2573]	[,2574]	[,2575]	[,2576]	[,2577]	[,2578]	[,2579]	[,2580]
[1,]	"G"	"G"	"G"	"T"	"G"	"G"	"C"	"C"	"A"	"A"	"A"	"G"	"T"
[2,]	"G"	"G"	"G"	"T"	"G"	"G"	"C"	"C"	"A"	"A"	"A"	"G"	"T"
[3,]	"G"	"G"	"G"	"T"	"G"	"G"	"C"	"C"	"A"	"A"	"A"	"G"	"T"
[4,]	"G"	"G"	"G"	"T"	"G"	"G"	"C"	"C"	"A"	"A"	"A"	"G"	"T"
[5,]	"G"	"G"	"G"	"T"	"G"	"G"	"C"	"C"	"A"	"A"	"A"	"G"	"T"
[6,]	"G"	"G"	"G"	"T"	"G"	"G"	"C"	"C"	"A"	"A"	"A"	"G"	"T"
	[,2581]	[,2582]	[,2583]	[,2584]	[,2585]	[,2586]	[,2587]	[,2588]	[,2589]	[,2590]	[,2591]	[,2592]	[,2593]
[1,]	"G"	"T"	"A"	"C"	"A"	"A"	"T"	"T"	"T"	"T"	"C"	"A"	"T"
[2,]	"G"	"T"	"A"	"C"	"A"	"A"	"T"	"T"	"T"	"T"	"C"	"A"	"T"
[3,]	"G"	"T"	"A"	"C"	"A"	"A"	"T"	"T"	"T"	"T"	"C"	"A"	"T"
[4,]	"A"	"T"	"A"	"T"	"A"	"A"	"T"	"T"	"T"	"T"	"C"	"A"	"T"
[5,]	"G"	"T"	"A"	"T"	"A"	"A"	"T"	"T"	"T"	"T"	"C"	"A"	"T"
[6,]	"G"	"T"	"A"	"C"	"A"	"A"	"T"	"T"	"T"	"T"	"C"	"A"	"T"
	[,2594]	[,2595]	[,2596]	[,2597]	[,2598]	[,2599]	[,2600]	[,2601]	[,2602]	[,2603]	[,2604]	[,2605]	[,2606]
[1,]	"C"	"C"	"C"	"A"	"C"	"A"	"A"	"T"	"T"	"G"	"A"	"A"	"A"
[2,]	"C"	"C"	"C"	"A"	"C"	"A"	"A"	"T"	"T"	"G"	"A"	"A"	"A"
[3,]	"C"	"C"	"C"	"A"	"C"	"A"	"A"	"T"	"T"	"G"	"A"	"A"	"A"
[4,]	"C"	"C"	"C"	"A"	"C"	"A"	"A"	"T"	"T"	"G"	"A"	"A"	"A"
[5,]	"C"	"C"	"C"	"A"	"C"	"A"	"A"	"T"	"T"	"G"	"A"	"A"	"A"
[6,]	"C"	"C"	"C"	"A"	"C"	"A"	"A"	"T"	"T"	"G"	"A"	"A"	"A"
	[,2607]	[,2608]	[,2609]	[,2610]	[,2611]	[,2612]	[,2613]	[,2614]	[,2615]	[,2616]	[,2617]	[,2618]	[,2619]
[1,]	"T"	"T"	"T"	"T"	"T"	"A"	"A"	"A"	"T"	"C"	"A"	"T"	"T"
[2,]	"T"	"T"	"T"	"T"	"T"	"A"	"A"	"A"	"T"	"C"	"A"	"T"	"T"
[3,]	"T"	"T"	"T"	"T"	"T"	"A"	"A"	"A"	"T"	"C"	"A"	"T"	"T"
[4,]	"T"	"T"	"T"	"T"	"T"	"A"	"A"	"A"	"T"	"C"	"A"	"T"	"T"
[5,]	"T"	"T"	"T"	"T"	"T"	"A"	"A"	"A"	"T"	"C"	"A"	"T"	"T"
[6,]	"T"	"T"	"T"	"T"	"T"	"A"	"A"	"A"	"T"	"C"	"A"	"T"	"T"
	[,2620]	[,2621]	[,2622]	[,2623]	[,2624]	[,2625]	[,2626]	[,2627]	[,2628]	[,2629]	[,2630]	[,2631]	[,2632]
[1,]	"T"	"C"	"A"	"T"	"G"	"T"	"T"	"A"	"G"	"T"	"C"	"T"	"T"
[2,]	"T"	"C"	"A"	"T"	"G"	"T"	"T"	"A"	"G"	"T"	"C"	"T"	"T"
[3,]	"T"	"C"	"A"	"T"	"G"	"T"	"T"	"A"	"G"	"T"	"C"	"T"	"T"
[4,]	"T"	"C"	"A"	"T"	"G"	"T"	"T"	"A"	"G"	"T"	"C"	"T"	"T"
[5,]	"T"	"C"	"A"	"T"	"G"	"T"	"T"	"A"	"G"	"T"	"C"	"T"	"T"
[6,]	"T"	"C"	"A"	"T"	"G"	"T"	"T"	"A"	"G"	"T"	"C"	"T"	"T"
	[,2633]	[,2634]	[,2635]	[,2636]	[,2637]	[,2638]	[,2639]	[,2640]	[,2641]	[,2642]	[,2643]	[,2644]	[,2645]
[1,]	"A"	"C"	"C"	"T"	"A"	"A"	"T"	"A"	"A"	"G"	"G"	"T"	"A"
[2,]	"A"	"C"	"C"	"T"	"A"	"A"	"T"	"A"	"A"	"G"	"G"	"T"	"A"
[3,]	"A"	"C"	"C"	"T"	"A"	"A"	"T"	"A"	"A"	"G"	"G"	"T"	"A"
[4,]	"A"	"C"	"C"	"T"	"A"	"A"	"T"	"A"	"A"	"G"	"G"	"T"	"A"
[5,]	"A"	"C"	"C"	"T"	"A"	"A"	"T"	"A"	"A"	"G"	"G"	"T"	"A"
[6,]	"A"	"C"	"C"	"T"	"A"	"A"	"T"	"A"	"A"	"G"	"G"	"T"	"A"
	[,2646]	[,2647]	[,2648]	[,2649]	[,2650]	[,2651]	[,2652]	[,2653]	[,2654]	[,2655]	[,2656]	[,2657]	[,2658]
[1,]	"C"	"C"	"A"	"A"	"G"	"A"	"T"	"C"	"A"	"C"	"A"	"A"	"A"
[2,]	"C"	"C"	"A"	"A"	"G"	"A"	"T"	"C"	"A"	"C"	"A"	"A"	"A"
[3,]	"C"	"C"	"A"	"A"	"G"	"A"	"T"	"C"	"A"	"C"	"A"	"A"	"A"
[4,]	"C"	"C"	"A"	"A"	"G"	"A"	"T"	"C"	"A"	"C"	"A"	"A"	"A"
[5,]	"C"	"C"	"A"	"A"	"G"	"A"	"T"	"C"	"A"	"C"	"A"	"A"	"A"
[6,]	"C"	"C"	"A"	"A"	"G"	"A"	"T"	"C"	"A"	"C"	"A"	"A"	"A"
	[,2659]	[,2660]	[,2661]	[,2662]	[,2663]	[,2664]	[,2665]	[,2666]	[,2667]	[,2668]	[,2669]	[,2670]	[,2671]
[1,]	"T"	"A"	"G"	"T"	"G"	"T"	"T"	"G"	"A"	"T"	"C"	"A"	"G"
[2,]	"T"	"A"	"G"	"T"	"G"	"T"	"T"	"G"	"A"	"T"	"C"	"A"	"G"
[3,]	"T"	"A"	"G"	"T"	"G"	"T"	"T"	"G"	"A"	"T"	"C"	"A"	"G"
[4,]	"T"	"A"	"G"	"T"	"G"	"T"	"T"	"G"	"A"	"T"	"C"	"A"	"G"
[5,]	"T"	"A"	"G"	"T"	"G"	"T"	"T"	"G"	"A"	"T"	"C"	"A"	"G"
[6,]	"T"	"A"	"G"	"T"	"G"	"T"	"T"	"G"	"A"	"T"	"C"	"A"	"G"
	[,2672]	[,2673]	[,2674]	[,2675]	[,2676]	[,2677]	[,2678]	[,2679]	[,2680]	[,2681]	[,2682]	[,2683]	[,2684]
[1,]	"A"	"T"	"C"	"T"	"T"	"A"	"C"	"A"	"A"	"G"	"T"	"T"	"T"
[2,]	"A"	"T"	"C"	"T"	"T"	"A"	"C"	"A"	"A"	"G"	"T"	"T"	"T"
[3,]	"A"	"T"	"C"	"T"	"T"	"A"	"C"	"A"	"A"	"G"	"T"	"T"	"T"
[4,]	"A"	"T"	"C"	"T"	"T"	"A"	"C"	"A"	"A"	"G"	"T"	"T"	"T"
[5,]	"A"	"T"	"C"	"T"	"T"	"A"	"C"	"A"	"A"	"G"	"T"	"T"	"T"
[6,]	"A"	"T"	"C"	"T"	"T"	"A"	"C"	"A"	"A"	"G"	"T"	"T"	"T"
	[,2685]	[,2686]	[,2687]	[,2688]	[,2689]	[,2690]	[,2691]	[,2692]	[,2693]	[,2694]	[,2695]	[,2696]	[,2697]
[1,]	"A"	"T"	"G"	"T"	"G"	"G"	"C"	"A"	"C"	"A"	"C"	"A"	"A"
[2,]	"A"	"T"	"G"	"T"	"G"	"G"	"C"	"A"	"C"	"A"	"C"	"A"	"A"
[3,]	"A"	"T"	"G"	"T"	"G"	"G"	"C"	"A"	"C"	"A"	"C"	"A"	"A"
[4,]	"A"	"T"	"G"	"T"	"G"	"G"	"C"	"A"	"C"	"A"	"C"	"A"	"A"
[5,]	"A"	"T"	"G"	"T"	"G"	"G"	"C"	"A"	"C"	"A"	"C"	"A"	"A"
[6,]	"A"	"T"	"G"	"T"	"G"	"G"	"C"	"A"	"C"	"A"	"C"	"A"	"A"
	[,2698]	[,2699]	[,2700]	[,2701]	[,2702]	[,2703]	[,2704]	[,2705]	[,2706]	[,2707]	[,2708]	[,2709]	[,2710]
[1,]	"T"	"C"	"C"	"T"	"A"	"T"	"A"	"A"	"A"	"T"	"G"	"T"	"G"
[2,]	"T"	"C"	"C"	"T"	"A"	"T"	"A"	"A"	"A"	"T"	"G"	"T"	"G"

[3,]	"T"	"C"	"C"	"T"	"A"	"T"	"A"	"A"	"A"	"T"	"G"	"T"	"G"
[4,]	"T"	"C"	"C"	"T"	"A"	"T"	"A"	"A"	"A"	"T"	"G"	"T"	"G"
[5,]	"T"	"C"	"C"	"T"	"A"	"T"	"A"	"A"	"A"	"T"	"G"	"T"	"G"
[6,]	"T"	"C"	"C"	"T"	"A"	"T"	"A"	"A"	"A"	"T"	"G"	"T"	"G"
	[,2711]	[,2712]	[,2713]	[,2714]	[,2715]	[,2716]	[,2717]	[,2718]	[,2719]	[,2720]	[,2721]	[,2722]	[,2723]
[1,]	"A"	"T"	"T"	"T"	"T"	"T"	"T"	"T"	"A"	"T"	"A"	"T"	"A"
[2,]	"A"	"T"	"T"	"T"	"_"	"T"	"T"	"T"	"A"	"T"	"A"	"T"	"A"
[3,]	"A"	"T"	"T"	"T"	"_"	"T"	"T"	"T"	"A"	"T"	"A"	"T"	"A"
[4,]	"A"	"T"	"T"	"T"	"_"	"T"	"T"	"T"	"A"	"T"	"A"	"T"	"A"
[5,]	"A"	"T"	"T"	"T"	"_"	"T"	"T"	"T"	"A"	"T"	"A"	"T"	"A"
[6,]	"A"	"T"	"T"	"T"	"_"	"T"	"T"	"T"	"A"	"T"	"A"	"T"	"A"
	[,2724]	[,2725]	[,2726]	[,2727]	[,2728]	[,2729]	[,2730]	[,2731]	[,2732]	[,2733]	[,2734]	[,2735]	[,2736]
[1,]	"A"	"G"	"T"	"T"	"A"	"A"	"A"	"G"	"A"	"G"	"A"	"C"	"A"
[2,]	"A"	"G"	"T"	"T"	"A"	"A"	"A"	"G"	"A"	"G"	"A"	"C"	"A"
[3,]	"A"	"G"	"T"	"T"	"A"	"A"	"A"	"G"	"A"	"G"	"A"	"C"	"A"
[4,]	"A"	"G"	"T"	"T"	"A"	"A"	"A"	"G"	"A"	"G"	"A"	"C"	"A"
[5,]	"A"	"G"	"T"	"T"	"A"	"A"	"A"	"G"	"A"	"G"	"A"	"C"	"A"
[6,]	"A"	"G"	"T"	"T"	"A"	"A"	"A"	"G"	"A"	"G"	"A"	"C"	"A"
	[,2737]	[,2738]	[,2739]	[,2740]	[,2741]	[,2742]	[,2743]	[,2744]	[,2745]	[,2746]	[,2747]	[,2748]	[,2749]
[1,]	"A"	"A"	"T"	"A"	"G"	"T"	"A"	"G"	"G"	"C"	"T"	"A"	"A"
[2,]	"A"	"A"	"T"	"A"	"G"	"T"	"A"	"G"	"G"	"C"	"T"	"A"	"A"
[3,]	"A"	"A"	"T"	"A"	"G"	"T"	"A"	"G"	"G"	"C"	"T"	"A"	"A"
[4,]	"A"	"A"	"T"	"A"	"G"	"T"	"A"	"G"	"G"	"C"	"T"	"A"	"A"
[5,]	"A"	"A"	"T"	"A"	"G"	"T"	"A"	"G"	"G"	"C"	"T"	"A"	"A"
[6,]	"A"	"A"	"T"	"A"	"G"	"T"	"A"	"G"	"G"	"C"	"T"	"A"	"A"
	[,2750]	[,2751]	[,2752]	[,2753]	[,2754]	[,2755]	[,2756]	[,2757]	[,2758]	[,2759]	[,2760]	[,2761]	[,2762]
[1,]	"A"	"A"	"A"	"C"	"A"	"T"	"T"	"T"	"T"	"A"	"A"	"A"	"A"
[2,]	"A"	"A"	"A"	"C"	"A"	"T"	"T"	"T"	"T"	"A"	"A"	"A"	"A"
[3,]	"A"	"A"	"A"	"C"	"A"	"T"	"T"	"T"	"T"	"A"	"A"	"A"	"A"
[4,]	"A"	"A"	"A"	"C"	"A"	"T"	"T"	"T"	"T"	"A"	"A"	"A"	"A"
[5,]	"A"	"A"	"A"	"C"	"A"	"T"	"T"	"T"	"T"	"A"	"A"	"A"	"A"
[6,]	"A"	"A"	"A"	"C"	"A"	"T"	"T"	"T"	"T"	"A"	"A"	"A"	"A"
	[,2763]	[,2764]	[,2765]	[,2766]	[,2767]	[,2768]	[,2769]	[,2770]	[,2771]	[,2772]	[,2773]	[,2774]	[,2775]
[1,]	"T"	"C"	"A"	"A"	"C"	"T"	"T"	"T"	"T"	"G"	"A"	"A"	"A"
[2,]	"T"	"C"	"A"	"A"	"C"	"T"	"T"	"T"	"T"	"G"	"A"	"A"	"A"
[3,]	"T"	"C"	"A"	"A"	"C"	"T"	"T"	"T"	"T"	"G"	"A"	"A"	"A"
[4,]	"T"	"C"	"A"	"A"	"C"	"T"	"T"	"T"	"T"	"G"	"A"	"A"	"A"
[5,]	"T"	"C"	"A"	"A"	"C"	"T"	"T"	"T"	"T"	"G"	"A"	"A"	"A"
[6,]	"T"	"C"	"A"	"A"	"C"	"T"	"T"	"T"	"T"	"G"	"A"	"A"	"A"
	[,2776]	[,2777]	[,2778]	[,2779]	[,2780]	[,2781]	[,2782]	[,2783]	[,2784]	[,2785]	[,2786]	[,2787]	[,2788]
[1,]	"T"	"T"	"T"	"A"	"A"	"A"	"A"	"A"	"T"	"C"	"T"	"T"	"T"
[2,]	"T"	"T"	"T"	"A"	"A"	"A"	"A"	"A"	"T"	"C"	"T"	"T"	"T"
[3,]	"T"	"T"	"T"	"A"	"A"	"A"	"A"	"A"	"T"	"C"	"T"	"T"	"T"
[4,]	"T"	"T"	"T"	"A"	"A"	"A"	"A"	"A"	"T"	"C"	"T"	"T"	"T"
[5,]	"T"	"T"	"T"	"A"	"A"	"A"	"A"	"A"	"T"	"C"	"T"	"T"	"T"
[6,]	"T"	"T"	"T"	"A"	"A"	"A"	"A"	"A"	"T"	"C"	"T"	"T"	"T"
	[,2789]	[,2790]	[,2791]	[,2792]	[,2793]	[,2794]	[,2795]	[,2796]	[,2797]	[,2798]	[,2799]	[,2800]	[,2801]
[1,]	"C"	"A"	"G"	"A"	"A"	"T"	"A"	"C"	"A"	"A"	"T"	"T"	"C"
[2,]	"C"	"A"	"G"	"A"	"A"	"T"	"A"	"C"	"A"	"A"	"T"	"T"	"C"
[3,]	"C"	"A"	"G"	"A"	"A"	"T"	"A"	"C"	"A"	"A"	"T"	"T"	"C"
[4,]	"C"	"A"	"G"	"A"	"A"	"T"	"A"	"C"	"A"	"A"	"T"	"T"	"G"
[5,]	"C"	"A"	"G"	"A"	"A"	"T"	"A"	"C"	"A"	"A"	"T"	"T"	"C"
[6,]	"C"	"A"	"G"	"A"	"A"	"T"	"A"	"C"	"A"	"A"	"T"	"T"	"C"
	[,2802]	[,2803]	[,2804]	[,2805]	[,2806]	[,2807]	[,2808]	[,2809]	[,2810]	[,2811]	[,2812]	[,2813]	[,2814]
[1,]	"A"	"G"	"T"	"T"	"T"	"T"	"A"	"G"	"T"	"T"	"T"	"C"	"A"
[2,]	"A"	"G"	"T"	"T"	"T"	"T"	"A"	"G"	"T"	"T"	"T"	"C"	"A"
[3,]	"A"	"G"	"T"	"T"	"T"	"T"	"A"	"G"	"T"	"T"	"T"	"C"	"A"
[4,]	"A"	"G"	"T"	"T"	"T"	"T"	"A"	"G"	"T"	"T"	"T"	"C"	"A"
[5,]	"A"	"G"	"T"	"T"	"T"	"T"	"A"	"G"	"T"	"T"	"T"	"C"	"A"
[6,]	"A"	"G"	"T"	"T"	"T"	"T"	"A"	"G"	"T"	"T"	"T"	"C"	"A"
	[,2815]	[,2816]	[,2817]	[,2818]	[,2819]	[,2820]	[,2821]	[,2822]	[,2823]	[,2824]	[,2825]	[,2826]	[,2827]
[1,]	"A"	"A"	"A"	"T"	"G"	"T"	"T"	"A"	"A"	"C"	"A"	"A"	"C"
[2,]	"A"	"A"	"A"	"T"	"G"	"T"	"T"	"A"	"A"	"C"	"A"	"A"	"C"
[3,]	"A"	"A"	"A"	"T"	"G"	"T"	"T"	"A"	"A"	"C"	"A"	"A"	"C"
[4,]	"A"	"A"	"A"	"T"	"G"	"T"	"T"	"A"	"A"	"C"	"A"	"A"	"C"
[5,]	"A"	"A"	"A"	"T"	"G"	"T"	"T"	"A"	"A"	"C"	"A"	"A"	"C"
[6,]	"A"	"A"	"A"	"T"	"G"	"T"	"T"	"A"	"A"	"C"	"A"	"A"	"C"
	[,2828]	[,2829]	[,2830]	[,2831]	[,2832]	[,2833]	[,2834]	[,2835]	[,2836]	[,2837]	[,2838]	[,2839]	[,2840]
[1,]	"T"	"T"	"G"	"A"	"A"	"T"	"T"	"A"	"C"	"A"	"A"	"C"	"C"
[2,]	"T"	"T"	"G"	"A"	"A"	"T"	"T"	"A"	"C"	"A"	"A"	"C"	"C"
[3,]	"T"	"T"	"G"	"A"	"A"	"T"	"T"	"A"	"C"	"A"	"A"	"C"	"C"
[4,]	"T"	"T"	"G"	"A"	"A"	"T"	"T"	"A"	"C"	"A"	"A"	"C"	"C"
[5,]	"T"	"T"	"G"	"A"	"A"	"T"	"T"	"A"	"C"	"A"	"A"	"C"	"C"
[6,]	"T"	"T"	"G"	"A"	"A"	"T"	"T"	"A"	"C"	"A"	"A"	"C"	"C"
	[,2841]	[,2842]	[,2843]	[,2844]	[,2845]	[,2846]	[,2847]	[,2848]	[,2849]	[,2850]	[,2851]	[,2852]	[,2853]
[1,]	"G"	"G"	"T"	"T"	"A"	"T"	"C"	"A"	"G"	"T"	"T"	"G"	"G"

[2,]	"G"	"G"	"T"	"T"	"A"	"T"	"C"	"A"	"G"	"T"	"T"	"G"	"G"
[3,]	"A"	"G"	"T"	"T"	"A"	"T"	"C"	"A"	"G"	"T"	"T"	"G"	"G"
[4,]	"G"	"G"	"T"	"T"	"A"	"T"	"C"	"A"	"G"	"T"	"T"	"G"	"G"
[5,]	"G"	"G"	"T"	"T"	"A"	"T"	"C"	"A"	"G"	"T"	"T"	"G"	"G"
[6,]	"A"	"G"	"T"	"T"	"A"	"T"	"C"	"A"	"G"	"T"	"T"	"G"	"G"
	[,2854]	[,2855]	[,2856]	[,2857]	[,2858]	[,2859]	[,2860]	[,2861]	[,2862]	[,2863]	[,2864]	[,2865]	[,2866]
[1,]	"A"	"C"	"A"	"G"	"T"	"A"	"A"	"G"	"A"	"T"	"T"	"T"	"T"
[2,]	"A"	"C"	"A"	"G"	"C"	"A"	"A"	"G"	"A"	"T"	"T"	"T"	"T"
[3,]	"A"	"C"	"A"	"G"	"T"	"A"	"A"	"G"	"A"	"T"	"T"	"T"	"T"
[4,]	"A"	"C"	"A"	"G"	"T"	"A"	"A"	"G"	"A"	"T"	"T"	"T"	"T"
[5,]	"A"	"C"	"A"	"G"	"T"	"A"	"A"	"G"	"A"	"T"	"T"	"T"	"T"
[6,]	"A"	"C"	"A"	"G"	"T"	"A"	"A"	"G"	"A"	"T"	"T"	"T"	"T"
	[,2867]	[,2868]	[,2869]	[,2870]	[,2871]	[,2872]	[,2873]	[,2874]	[,2875]	[,2876]	[,2877]	[,2878]	[,2879]
[1,]	"A"	"T"	"C"	"C"	"C"	"T"	"T"	"T"	"C"	"T"	"C"	"T"	"T"
[2,]	"A"	"T"	"C"	"C"	"C"	"T"	"T"	"T"	"C"	"T"	"G"	"T"	"T"
[3,]	"A"	"T"	"C"	"C"	"C"	"T"	"T"	"T"	"C"	"T"	"C"	"T"	"T"
[4,]	"G"	"T"	"C"	"C"	"C"	"T"	"T"	"T"	"C"	"T"	"C"	"T"	"T"
[5,]	"G"	"T"	"C"	"C"	"C"	"T"	"T"	"T"	"C"	"T"	"C"	"T"	"T"
[6,]	"A"	"T"	"C"	"C"	"C"	"T"	"T"	"T"	"C"	"T"	"C"	"T"	"T"
	[,2880]	[,2881]	[,2882]	[,2883]	[,2884]	[,2885]	[,2886]	[,2887]	[,2888]	[,2889]	[,2890]	[,2891]	[,2892]
[1,]	"C"	"T"	"G"	"A"	"C"	"T"	"G"	"G"	"T"	"A"	"T"	"A"	"C"
[2,]	"C"	"T"	"G"	"A"	"C"	"T"	"G"	"G"	"T"	"A"	"T"	"A"	"C"
[3,]	"C"	"T"	"G"	"A"	"C"	"T"	"G"	"G"	"T"	"A"	"T"	"A"	"C"
[4,]	"C"	"T"	"G"	"A"	"C"	"T"	"G"	"G"	"T"	"A"	"T"	"A"	"C"
[5,]	"C"	"T"	"G"	"A"	"C"	"T"	"G"	"G"	"T"	"A"	"T"	"A"	"C"
[6,]	"C"	"T"	"G"	"A"	"C"	"T"	"G"	"G"	"T"	"A"	"T"	"A"	"C"
	[,2893]	[,2894]	[,2895]	[,2896]	[,2897]	[,2898]	[,2899]	[,2900]	[,2901]	[,2902]	[,2903]	[,2904]	[,2905]
[1,]	"C"	"T"	"A"	"T"	"T"	"T"	"C"	"A"	"T"	"T"	"A"	"G"	"T"
[2,]	"C"	"T"	"A"	"T"	"T"	"T"	"C"	"A"	"T"	"T"	"A"	"G"	"T"
[3,]	"C"	"T"	"A"	"T"	"T"	"T"	"C"	"A"	"T"	"T"	"A"	"G"	"T"
[4,]	"C"	"T"	"A"	"T"	"T"	"T"	"C"	"A"	"T"	"T"	"A"	"G"	"T"
[5,]	"C"	"T"	"A"	"T"	"T"	"T"	"C"	"A"	"T"	"T"	"A"	"G"	"T"
[6,]	"C"	"T"	"A"	"T"	"T"	"T"	"C"	"A"	"T"	"T"	"A"	"G"	"T"
	[,2906]	[,2907]	[,2908]	[,2909]	[,2910]	[,2911]	[,2912]	[,2913]	[,2914]	[,2915]	[,2916]	[,2917]	[,2918]
[1,]	"A"	"G"	"C"	"T"	"A"	"G"	"G"	"T"	"G"	"C"	"A"	"C"	"A"
[2,]	"A"	"G"	"C"	"T"	"A"	"G"	"G"	"T"	"G"	"C"	"A"	"C"	"A"
[3,]	"A"	"G"	"C"	"T"	"A"	"G"	"G"	"T"	"G"	"C"	"A"	"C"	"A"
[4,]	"A"	"G"	"C"	"T"	"A"	"G"	"G"	"T"	"G"	"C"	"A"	"C"	"G"
[5,]	"A"	"G"	"C"	"T"	"A"	"G"	"G"	"T"	"G"	"C"	"A"	"C"	"A"
[6,]	"A"	"G"	"C"	"T"	"A"	"G"	"G"	"T"	"G"	"C"	"A"	"C"	"A"
	[,2919]	[,2920]	[,2921]	[,2922]	[,2923]	[,2924]	[,2925]	[,2926]	[,2927]	[,2928]	[,2929]	[,2930]	[,2931]
[1,]	"T"	"A"	"T"	"A"	"C"	"A"	"T"	"C"	"T"	"A"	"G"	"C"	"A"
[2,]	"T"	"A"	"T"	"A"	"C"	"A"	"T"	"C"	"T"	"A"	"G"	"C"	"A"
[3,]	"T"	"A"	"T"	"A"	"C"	"A"	"T"	"C"	"T"	"A"	"G"	"C"	"A"
[4,]	"T"	"A"	"T"	"A"	"C"	"A"	"T"	"C"	"T"	"A"	"G"	"C"	"A"
[5,]	"T"	"A"	"T"	"A"	"C"	"A"	"T"	"C"	"T"	"A"	"G"	"C"	"A"
[6,]	"T"	"A"	"T"	"A"	"C"	"A"	"T"	"C"	"T"	"A"	"G"	"C"	"A"
	[,2932]	[,2933]	[,2934]	[,2935]	[,2936]	[,2937]	[,2938]	[,2939]	[,2940]	[,2941]	[,2942]	[,2943]	[,2944]
[1,]	"C"	"A"	"G"	"C"	"T"	"G"	"T"	"G"	"A"	"G"	"G"	"A"	"C"
[2,]	"C"	"A"	"G"	"C"	"T"	"G"	"T"	"G"	"A"	"G"	"G"	"A"	"C"
[3,]	"C"	"A"	"G"	"C"	"T"	"G"	"T"	"G"	"A"	"G"	"G"	"A"	"C"
[4,]	"C"	"A"	"G"	"C"	"T"	"G"	"T"	"G"	"A"	"G"	"G"	"A"	"G"
[5,]	"C"	"A"	"G"	"C"	"T"	"G"	"T"	"G"	"A"	"G"	"G"	"A"	"G"
[6,]	"C"	"A"	"G"	"C"	"T"	"G"	"T"	"G"	"A"	"G"	"G"	"A"	"C"
	[,2945]	[,2946]	[,2947]	[,2948]	[,2949]	[,2950]	[,2951]	[,2952]	[,2953]	[,2954]	[,2955]	[,2956]	[,2957]
[1,]	"A"	"G"	"A"	"C"	"A"	"G"	"A"	"A"	"G"	"G"	"C"	"A"	"A"
[2,]	"A"	"G"	"A"	"C"	"A"	"G"	"A"	"A"	"G"	"G"	"C"	"A"	"A"
[3,]	"A"	"G"	"A"	"C"	"A"	"G"	"A"	"A"	"G"	"G"	"C"	"A"	"A"
[4,]	"A"	"G"	"A"	"C"	"A"	"G"	"A"	"A"	"G"	"G"	"C"	"A"	"A"
[5,]	"A"	"G"	"A"	"C"	"A"	"G"	"A"	"A"	"G"	"G"	"C"	"A"	"A"
[6,]	"A"	"G"	"A"	"C"	"A"	"G"	"A"	"A"	"G"	"G"	"C"	"A"	"A"
	[,2958]	[,2959]	[,2960]	[,2961]	[,2962]	[,2963]	[,2964]	[,2965]	[,2966]	[,2967]	[,2968]	[,2969]	[,2970]
[1,]	"A"	"G"	"T"	"T"	"T"	"C"	"C"	"A"	"T"	"G"	"T"	"G"	"G"
[2,]	"A"	"G"	"T"	"T"	"T"	"C"	"C"	"A"	"T"	"G"	"T"	"G"	"G"
[3,]	"A"	"G"	"T"	"T"	"T"	"C"	"C"	"A"	"T"	"G"	"T"	"G"	"G"
[4,]	"A"	"G"	"T"	"T"	"T"	"C"	"C"	"A"	"T"	"G"	"T"	"G"	"G"
[5,]	"A"	"G"	"T"	"T"	"T"	"C"	"C"	"A"	"T"	"G"	"T"	"A"	"G"
[6,]	"A"	"G"	"T"	"T"	"T"	"C"	"C"	"A"	"T"	"G"	"T"	"G"	"G"
	[,2971]	[,2972]	[,2973]	[,2974]	[,2975]	[,2976]	[,2977]	[,2978]	[,2979]	[,2980]	[,2981]	[,2982]	[,2983]
[1,]	"C"	"C"	"T"	"T"	"G"	"A"	"G"	"C"	"A"	"A"	"G"	"T"	"C"
[2,]	"C"	"C"	"T"	"T"	"G"	"A"	"G"	"C"	"A"	"A"	"G"	"T"	"C"
[3,]	"C"	"C"	"T"	"T"	"G"	"A"	"G"	"C"	"A"	"A"	"G"	"T"	"C"
[4,]	"C"	"C"	"T"	"T"	"G"	"A"	"G"	"C"	"A"	"A"	"G"	"T"	"C"
[5,]	"C"	"C"	"T"	"T"	"G"	"A"	"G"	"C"	"A"	"A"	"G"	"T"	"C"
[6,]	"C"	"C"	"T"	"T"	"G"	"A"	"G"	"C"	"A"	"A"	"G"	"T"	"C"
	[,2984]	[,2985]	[,2986]	[,2987]	[,2988]	[,2989]	[,2990]	[,2991]	[,2992]	[,2993]	[,2994]	[,2995]	[,2996]

[1,]	"C"	"C"	"A"	"T"	"C"	"T"	"C"	"A"	"C"	"C"	"T"	"C"	"T"
[2,]	"C"	"C"	"A"	"T"	"C"	"T"	"C"	"A"	"C"	"C"	"T"	"C"	"T"
[3,]	"C"	"C"	"A"	"T"	"C"	"T"	"C"	"A"	"C"	"C"	"T"	"C"	"T"
[4,]	"C"	"C"	"A"	"T"	"C"	"T"	"C"	"A"	"C"	"C"	"T"	"C"	"T"
[5,]	"C"	"C"	"A"	"T"	"C"	"T"	"C"	"A"	"C"	"C"	"T"	"C"	"T"
[6,]	"C"	"C"	"A"	"T"	"C"	"T"	"C"	"A"	"C"	"C"	"T"	"C"	"T"
	[,2997]	[,2998]	[,2999]	[,3000]	[,3001]	[,3002]	[,3003]	[,3004]	[,3005]	[,3006]	[,3007]	[,3008]	[,3009]
[1,]	"A"	"G"	"G"	"C"	"C"	"T"	"C"	"A"	"G"	"T"	"G"	"T"	"C"
[2,]	"A"	"G"	"G"	"C"	"C"	"T"	"C"	"A"	"G"	"T"	"G"	"T"	"C"
[3,]	"A"	"G"	"G"	"C"	"C"	"T"	"C"	"A"	"G"	"T"	"G"	"T"	"C"
[4,]	"A"	"G"	"G"	"C"	"C"	"T"	"C"	"A"	"G"	"T"	"G"	"T"	"C"
[5,]	"A"	"G"	"G"	"C"	"C"	"T"	"C"	"A"	"G"	"T"	"G"	"T"	"C"
[6,]	"A"	"G"	"G"	"C"	"C"	"T"	"C"	"A"	"G"	"T"	"G"	"T"	"C"
	[,3010]	[,3011]	[,3012]	[,3013]	[,3014]	[,3015]	[,3016]	[,3017]	[,3018]	[,3019]	[,3020]	[,3021]	[,3022]
[1,]	"C"	"T"	"A"	"T"	"C"	"T"	"A"	"T"	"A"	"A"	"A"	"A"	"A"
[2,]	"C"	"T"	"C"	"A"	"T"	"C"	"T"	"A"	"T"	"A"	"A"	"A"	"A"
[3,]	"C"	"T"	"C"	"A"	"T"	"C"	"T"	"A"	"T"	"A"	"A"	"A"	"A"
[4,]	"C"	"T"	"C"	"A"	"T"	"C"	"T"	"A"	"T"	"A"	"A"	"A"	"A"
[5,]	"C"	"T"	"C"	"A"	"T"	"C"	"T"	"A"	"T"	"A"	"A"	"A"	"A"
[6,]	"C"	"T"	"C"	"A"	"T"	"C"	"T"	"A"	"T"	"A"	"A"	"A"	"A"
	[,3023]	[,3024]	[,3025]	[,3026]	[,3027]	[,3028]	[,3029]	[,3030]	[,3031]	[,3032]	[,3033]	[,3034]	[,3035]
[1,]	"T"	"G"	"A"	"G"	"G"	"G"	"A"	"C"	"T"	"T"	"C"	"C"	"C"
[2,]	"T"	"G"	"A"	"G"	"G"	"G"	"A"	"C"	"T"	"T"	"C"	"C"	"C"
[3,]	"T"	"G"	"A"	"G"	"G"	"G"	"A"	"C"	"T"	"T"	"C"	"C"	"C"
[4,]	"T"	"G"	"A"	"G"	"G"	"G"	"A"	"C"	"T"	"T"	"C"	"C"	"C"
[5,]	"T"	"G"	"A"	"G"	"G"	"G"	"A"	"C"	"T"	"T"	"C"	"C"	"C"
[6,]	"T"	"G"	"A"	"G"	"G"	"G"	"A"	"C"	"T"	"T"	"C"	"C"	"C"
	[,3036]	[,3037]	[,3038]	[,3039]	[,3040]	[,3041]	[,3042]	[,3043]	[,3044]	[,3045]	[,3046]	[,3047]	[,3048]
[1,]	"T"	"A"	"G"	"A"	"A"	"G"	"T"	"C"	"T"	"T"	"C"	"A"	"T"
[2,]	"T"	"A"	"G"	"A"	"A"	"G"	"T"	"C"	"T"	"T"	"C"	"A"	"T"
[3,]	"T"	"A"	"G"	"A"	"A"	"G"	"T"	"C"	"T"	"T"	"C"	"A"	"T"
[4,]	"T"	"A"	"G"	"A"	"T"	"G"	"T"	"C"	"T"	"T"	"C"	"G"	"T"
[5,]	"T"	"A"	"G"	"A"	"T"	"G"	"T"	"C"	"T"	"T"	"C"	"A"	"T"
[6,]	"T"	"A"	"G"	"A"	"A"	"G"	"T"	"C"	"T"	"T"	"C"	"A"	"T"
	[,3049]	[,3050]	[,3051]	[,3052]	[,3053]	[,3054]	[,3055]	[,3056]	[,3057]	[,3058]	[,3059]	[,3060]	[,3061]
[1,]	"G"	"G"	"T"	"C"	"T"	"C"	"T"	"T"	"C"	"C"	"A"	"G"	"C"
[2,]	"G"	"G"	"T"	"C"	"T"	"C"	"T"	"T"	"C"	"C"	"A"	"G"	"C"
[3,]	"G"	"G"	"T"	"C"	"T"	"C"	"T"	"T"	"C"	"C"	"A"	"G"	"C"
[4,]	"G"	"G"	"T"	"C"	"T"	"C"	"T"	"T"	"C"	"C"	"A"	"G"	"C"
[5,]	"G"	"G"	"T"	"C"	"T"	"C"	"T"	"T"	"C"	"C"	"A"	"G"	"C"
[6,]	"G"	"G"	"T"	"C"	"T"	"C"	"T"	"T"	"C"	"C"	"A"	"G"	"C"
	[,3062]	[,3063]	[,3064]	[,3065]	[,3066]	[,3067]	[,3068]	[,3069]	[,3070]	[,3071]	[,3072]	[,3073]	[,3074]
[1,]	"C"	"C"	"A"	"G"	"A"	"C"	"A"	"T"	"C"	"C"	"T"	"G"	"T"
[2,]	"C"	"C"	"A"	"G"	"A"	"C"	"A"	"T"	"C"	"C"	"T"	"G"	"T"
[3,]	"C"	"C"	"A"	"G"	"A"	"C"	"A"	"T"	"C"	"C"	"T"	"G"	"T"
[4,]	"C"	"C"	"A"	"G"	"A"	"C"	"A"	"T"	"C"	"C"	"T"	"G"	"T"
[5,]	"C"	"C"	"A"	"G"	"A"	"C"	"A"	"T"	"C"	"C"	"T"	"G"	"T"
[6,]	"C"	"C"	"A"	"G"	"A"	"C"	"A"	"T"	"C"	"C"	"T"	"G"	"T"
	[,3075]	[,3076]	[,3077]	[,3078]	[,3079]	[,3080]	[,3081]	[,3082]	[,3083]	[,3084]	[,3085]	[,3086]	[,3087]
[1,]	"G"	"A"	"T"	"G"	"T"	"C"	"A"	"T"	"G"	"A"	"A"	"A"	"G"
[2,]	"G"	"A"	"T"	"G"	"T"	"C"	"A"	"T"	"G"	"A"	"A"	"A"	"G"
[3,]	"G"	"A"	"T"	"G"	"T"	"C"	"A"	"T"	"G"	"A"	"A"	"A"	"G"
[4,]	"G"	"A"	"T"	"G"	"T"	"C"	"A"	"T"	"G"	"A"	"A"	"A"	"G"
[5,]	"G"	"A"	"T"	"G"	"T"	"C"	"A"	"T"	"G"	"A"	"A"	"A"	"G"
[6,]	"G"	"A"	"T"	"G"	"T"	"C"	"A"	"T"	"G"	"A"	"A"	"A"	"G"
	[,3088]	[,3089]	[,3090]	[,3091]	[,3092]	[,3093]	[,3094]	[,3095]	[,3096]	[,3097]	[,3098]	[,3099]	[,3100]
[1,]	"C"	"A"	"C"	"C"	"T"	"G"	"C"	"C"	"C"	"T"	"C"	"T"	"G"
[2,]	"C"	"A"	"C"	"C"	"T"	"G"	"C"	"C"	"C"	"T"	"C"	"T"	"G"
[3,]	"C"	"A"	"C"	"C"	"T"	"G"	"C"	"C"	"C"	"T"	"C"	"T"	"G"
[4,]	"C"	"A"	"C"	"C"	"T"	"G"	"C"	"C"	"C"	"T"	"C"	"T"	"A"
[5,]	"C"	"A"	"C"	"C"	"T"	"G"	"C"	"C"	"C"	"T"	"C"	"T"	"A"
[6,]	"C"	"A"	"C"	"C"	"T"	"G"	"C"	"C"	"C"	"T"	"C"	"T"	"G"
	[,3101]	[,3102]	[,3103]	[,3104]	[,3105]	[,3106]	[,3107]	[,3108]	[,3109]	[,3110]	[,3111]	[,3112]	[,3113]
[1,]	"T"	"T"	"T"	"C"	"C"	"C"	"C"	"T"	"C"	"A"	"G"	"A"	"A"
[2,]	"T"	"T"	"T"	"C"	"C"	"C"	"C"	"T"	"C"	"A"	"G"	"A"	"A"
[3,]	"T"	"T"	"T"	"C"	"C"	"C"	"C"	"T"	"C"	"A"	"G"	"A"	"A"
[4,]	"C"	"T"	"T"	"C"	"C"	"C"	"C"	"T"	"C"	"A"	"G"	"A"	"A"
[5,]	"T"	"T"	"T"	"C"	"C"	"C"	"C"	"T"	"C"	"A"	"G"	"A"	"A"
[6,]	"T"	"T"	"T"	"C"	"C"	"C"	"C"	"T"	"C"	"A"	"G"	"A"	"A"
	[,3114]	[,3115]	[,3116]	[,3117]	[,3118]	[,3119]	[,3120]	[,3121]	[,3122]	[,3123]	[,3124]	[,3125]	[,3126]
[1,]	"C"	"A"	"C"	"C"	"C"	"T"	"G"	"T"	"A"	"C"	"C"	"A"	"T"
[2,]	"C"	"A"	"C"	"C"	"C"	"T"	"G"	"T"	"A"	"C"	"C"	"A"	"T"
[3,]	"C"	"A"	"C"	"C"	"C"	"T"	"G"	"T"	"A"	"C"	"C"	"A"	"T"
[4,]	"C"	"A"	"C"	"C"	"C"	"T"	"G"	"T"	"A"	"C"	"C"	"A"	"T"
[5,]	"C"	"A"	"C"	"C"	"C"	"T"	"G"	"T"	"A"	"C"	"C"	"A"	"T"
[6,]	"C"	"A"	"C"	"C"	"C"	"T"	"G"	"T"	"A"	"C"	"C"	"A"	"T"

	[,3127]	[,3128]	[,3129]	[,3130]	[,3131]	[,3132]	[,3133]	[,3134]	[,3135]	[,3136]	[,3137]	[,3138]	[,3139]
[1,]	"C"	"C"	"A"	"T"	"G"	"G"	"A"	"G"	"C"	"A"	"C"	"G"	"A"
[2,]	"C"	"C"	"A"	"T"	"G"	"G"	"A"	"G"	"C"	"A"	"C"	"G"	"A"
[3,]	"C"	"C"	"A"	"T"	"G"	"G"	"A"	"G"	"C"	"A"	"C"	"G"	"A"
[4,]	"C"	"C"	"A"	"T"	"G"	"G"	"A"	"G"	"C"	"A"	"C"	"G"	"A"
[5,]	"C"	"C"	"A"	"T"	"G"	"G"	"A"	"G"	"C"	"A"	"C"	"G"	"A"
[6,]	"C"	"C"	"A"	"T"	"G"	"G"	"A"	"G"	"C"	"A"	"C"	"G"	"A"
	[,3140]	[,3141]	[,3142]	[,3143]	[,3144]	[,3145]	[,3146]	[,3147]	[,3148]	[,3149]	[,3150]	[,3151]	[,3152]
[1,]	"G"	"G"	"C"	"C"	"T"	"T"	"C"	"A"	"G"	"A"	"A"	"A"	"A"
[2,]	"G"	"G"	"C"	"C"	"T"	"T"	"C"	"A"	"G"	"A"	"A"	"A"	"A"
[3,]	"G"	"G"	"C"	"C"	"T"	"T"	"C"	"A"	"G"	"A"	"A"	"A"	"A"
[4,]	"G"	"G"	"C"	"C"	"T"	"T"	"C"	"A"	"G"	"A"	"A"	"A"	"A"
[5,]	"T"	"G"	"C"	"C"	"T"	"T"	"C"	"A"	"G"	"A"	"A"	"A"	"A"
[6,]	"G"	"G"	"C"	"C"	"T"	"T"	"C"	"A"	"G"	"A"	"A"	"A"	"A"
	[,3153]	[,3154]	[,3155]	[,3156]	[,3157]	[,3158]	[,3159]	[,3160]	[,3161]	[,3162]	[,3163]	[,3164]	[,3165]
[1,]	"G"	"A"	"C"	"A"	"C"	"T"	"T"	"C"	"A"	"A"	"T"	"G"	"G"
[2,]	"G"	"A"	"C"	"A"	"C"	"T"	"T"	"C"	"A"	"A"	"T"	"G"	"G"
[3,]	"G"	"A"	"C"	"A"	"C"	"T"	"T"	"C"	"A"	"A"	"T"	"G"	"G"
[4,]	"G"	"A"	"C"	"A"	"C"	"T"	"T"	"G"	"T"	"A"	"T"	"G"	"G"
[5,]	"G"	"A"	"C"	"A"	"C"	"T"	"T"	"C"	"A"	"A"	"T"	"G"	"G"
[6,]	"G"	"A"	"C"	"A"	"C"	"T"	"T"	"C"	"A"	"A"	"T"	"G"	"G"
	[,3166]	[,3167]	[,3168]	[,3169]	[,3170]	[,3171]	[,3172]	[,3173]	[,3174]	[,3175]	[,3176]	[,3177]	[,3178]
[1,]	"G"	"A"	"G"	"T"	"G"	"A"	"A"	"C"	"A"	"T"	"T"	"T"	"C"
[2,]	"G"	"A"	"G"	"T"	"G"	"A"	"A"	"C"	"A"	"T"	"T"	"T"	"C"
[3,]	"G"	"A"	"G"	"T"	"G"	"A"	"A"	"C"	"A"	"T"	"T"	"T"	"C"
[4,]	"G"	"A"	"G"	"T"	"G"	"A"	"A"	"C"	"A"	"T"	"T"	"T"	"C"
[5,]	"G"	"A"	"G"	"T"	"G"	"A"	"A"	"C"	"A"	"T"	"T"	"T"	"C"
[6,]	"G"	"A"	"G"	"T"	"G"	"A"	"A"	"C"	"A"	"T"	"T"	"T"	"C"
	[,3179]	[,3180]	[,3181]	[,3182]	[,3183]	[,3184]	[,3185]	[,3186]	[,3187]	[,3188]	[,3189]	[,3190]	[,3191]
[1,]	"T"	"A"	"A"	"C"	"T"	"A"	"A"	"G"	"G"	"A"	"C"	"A"	"G"
[2,]	"T"	"A"	"A"	"C"	"T"	"A"	"A"	"G"	"G"	"A"	"C"	"A"	"G"
[3,]	"T"	"A"	"A"	"C"	"T"	"A"	"A"	"G"	"G"	"A"	"C"	"A"	"G"
[4,]	"T"	"A"	"A"	"C"	"T"	"A"	"A"	"G"	"G"	"A"	"C"	"A"	"G"
[5,]	"T"	"A"	"A"	"C"	"T"	"A"	"A"	"G"	"G"	"A"	"C"	"A"	"G"
[6,]	"T"	"A"	"A"	"C"	"T"	"A"	"A"	"G"	"G"	"A"	"C"	"A"	"G"
	[,3192]	[,3193]	[,3194]	[,3195]	[,3196]	[,3197]	[,3198]	[,3199]	[,3200]	[,3201]	[,3202]	[,3203]	[,3204]
[1,]	"G"	"A"	"T"	"G"	"G"	"C"	"T"	"G"	"T"	"G"	"T"	"G"	"T"
[2,]	"G"	"A"	"T"	"G"	"G"	"C"	"T"	"G"	"T"	"G"	"T"	"G"	"T"
[3,]	"G"	"A"	"T"	"G"	"G"	"C"	"T"	"G"	"T"	"G"	"T"	"G"	"T"
[4,]	"G"	"A"	"T"	"G"	"G"	"C"	"T"	"G"	"T"	"G"	"T"	"G"	"T"
[5,]	"G"	"A"	"T"	"G"	"G"	"C"	"T"	"G"	"T"	"G"	"T"	"G"	"T"
[6,]	"G"	"A"	"T"	"G"	"G"	"C"	"T"	"G"	"T"	"G"	"T"	"G"	"T"
	[,3205]	[,3206]	[,3207]	[,3208]	[,3209]	[,3210]	[,3211]	[,3212]	[,3213]	[,3214]	[,3215]	[,3216]	[,3217]
[1,]	"G"	"G"	"T"	"G"	"G"	"T"	"C"	"A"	"C"	"C"	"A"	"G"	"G"
[2,]	"G"	"G"	"T"	"G"	"G"	"T"	"C"	"A"	"C"	"C"	"A"	"G"	"G"
[3,]	"G"	"G"	"T"	"G"	"G"	"T"	"C"	"A"	"C"	"C"	"A"	"G"	"G"
[4,]	"G"	"G"	"T"	"G"	"G"	"T"	"C"	"A"	"C"	"C"	"A"	"G"	"G"
[5,]	"G"	"G"	"T"	"G"	"G"	"T"	"C"	"A"	"C"	"C"	"A"	"G"	"G"
[6,]	"A"	"G"	"T"	"G"	"G"	"T"	"C"	"A"	"C"	"C"	"A"	"G"	"G"
	[,3218]	[,3219]	[,3220]	[,3221]	[,3222]	[,3223]	[,3224]	[,3225]	[,3226]	[,3227]	[,3228]	[,3229]	[,3230]
[1,]	"T"	"C"	"T"	"T"	"G"	"T"	"G"	"A"	"G"	"C"	"A"	"A"	"A"
[2,]	"T"	"C"	"C"	"T"	"G"	"T"	"G"	"A"	"G"	"C"	"A"	"A"	"A"
[3,]	"T"	"C"	"C"	"T"	"G"	"T"	"G"	"A"	"G"	"C"	"A"	"A"	"A"
[4,]	"T"	"C"	"C"	"T"	"G"	"T"	"G"	"A"	"G"	"C"	"A"	"A"	"A"
[5,]	"T"	"C"	"C"	"T"	"G"	"T"	"G"	"A"	"G"	"C"	"A"	"A"	"A"
[6,]	"T"	"C"	"C"	"T"	"G"	"T"	"G"	"A"	"G"	"C"	"A"	"A"	"A"
	[,3231]	[,3232]	[,3233]	[,3234]	[,3235]	[,3236]	[,3237]	[,3238]	[,3239]	[,3240]	[,3241]	[,3242]	[,3243]
[1,]	"G"	"T"	"G"	"C"	"A"	"G"	"G"	"T"	"T"	"A"	"T"	"G"	"C"
[2,]	"G"	"T"	"G"	"C"	"A"	"G"	"G"	"T"	"T"	"A"	"T"	"G"	"C"
[3,]	"G"	"T"	"G"	"C"	"A"	"G"	"G"	"T"	"T"	"A"	"T"	"G"	"C"
[4,]	"G"	"T"	"G"	"C"	"A"	"G"	"G"	"T"	"T"	"A"	"T"	"G"	"C"
[5,]	"G"	"T"	"G"	"C"	"A"	"G"	"G"	"T"	"T"	"A"	"T"	"G"	"C"
[6,]	"G"	"T"	"G"	"C"	"A"	"G"	"G"	"T"	"T"	"A"	"T"	"G"	"C"
	[,3244]	[,3245]	[,3246]	[,3247]	[,3248]	[,3249]	[,3250]	[,3251]	[,3252]	[,3253]	[,3254]	[,3255]	[,3256]
[1,]	"A"	"A"	"G"	"T"	"C"	"G"	"C"	"C"	"A"	"G"	"G"	"C"	"A"
[2,]	"A"	"A"	"G"	"T"	"C"	"G"	"C"	"C"	"A"	"G"	"G"	"C"	"A"
[3,]	"A"	"A"	"G"	"T"	"C"	"G"	"C"	"C"	"A"	"G"	"G"	"C"	"A"
[4,]	"A"	"A"	"G"	"T"	"C"	"G"	"C"	"C"	"A"	"G"	"G"	"C"	"A"
[5,]	"A"	"A"	"G"	"T"	"C"	"G"	"C"	"C"	"A"	"G"	"G"	"C"	"A"
[6,]	"A"	"A"	"G"	"T"	"C"	"G"	"C"	"C"	"A"	"G"	"G"	"C"	"A"
	[,3257]	[,3258]	[,3259]	[,3260]	[,3261]	[,3262]	[,3263]	[,3264]	[,3265]	[,3266]	[,3267]	[,3268]	[,3269]
[1,]	"G"	"G"	"A"	"G"	"G"	"C"	"C"	"A"	"T"	"T"	"C"	"C"	"A"
[2,]	"G"	"G"	"A"	"G"	"G"	"C"	"C"	"A"	"T"	"T"	"C"	"C"	"A"
[3,]	"G"	"G"	"A"	"G"	"G"	"C"	"C"	"A"	"T"	"T"	"C"	"C"	"A"
[4,]	"G"	"G"	"A"	"G"	"G"	"C"	"C"	"A"	"T"	"T"	"C"	"C"	"A"
[5,]	"G"	"G"	"A"	"G"	"G"	"C"	"C"	"A"	"T"	"T"	"C"	"C"	"A"

[6,]	"G"	"G"	"A"	"G"	"G"	"C"	"C"	"A"	"T"	"T"	"C"	"C"	"A"
	[,3270]	[,3271]	[,3272]	[,3273]	[,3274]	[,3275]	[,3276]	[,3277]	[,3278]	[,3279]	[,3280]	[,3281]	[,3282]
[1,]	"G"	"G"	"A"	"G"	"T"	"G"	"G"	"G"	"A"	"T"	"T"	"A"	"T"
[2,]	"G"	"G"	"A"	"G"	"T"	"G"	"G"	"G"	"A"	"T"	"T"	"A"	"T"
[3,]	"G"	"G"	"A"	"G"	"T"	"G"	"G"	"G"	"A"	"T"	"T"	"A"	"T"
[4,]	"T"	"G"	"A"	"G"	"T"	"G"	"G"	"G"	"A"	"T"	"T"	"A"	"T"
[5,]	"G"	"G"	"A"	"G"	"T"	"G"	"G"	"G"	"A"	"T"	"T"	"A"	"T"
[6,]	"G"	"G"	"A"	"G"	"T"	"G"	"G"	"G"	"A"	"T"	"T"	"A"	"T"
	[,3283]	[,3284]	[,3285]	[,3286]	[,3287]	[,3288]	[,3289]	[,3290]	[,3291]	[,3292]	[,3293]	[,3294]	[,3295]
[1,]	"T"	"C"	"A"	"T"	"C"	"A"	"A"	"A"	"C"	"T"	"C"	"T"	"T"
[2,]	"T"	"C"	"A"	"T"	"C"	"A"	"A"	"A"	"C"	"T"	"C"	"T"	"T"
[3,]	"T"	"C"	"A"	"T"	"C"	"A"	"A"	"A"	"C"	"T"	"C"	"T"	"T"
[4,]	"T"	"C"	"A"	"T"	"A"	"A"	"A"	"A"	"C"	"T"	"C"	"T"	"T"
[5,]	"T"	"C"	"A"	"T"	"A"	"A"	"A"	"A"	"C"	"T"	"C"	"T"	"T"
[6,]	"T"	"C"	"A"	"T"	"C"	"A"	"A"	"A"	"C"	"T"	"C"	"T"	"T"
	[,3296]	[,3297]	[,3298]	[,3299]	[,3300]	[,3301]	[,3302]	[,3303]	[,3304]	[,3305]	[,3306]	[,3307]	[,3308]
[1,]	"T"	"G"	"C"	"C"	"C"	"A"	"G"	"T"	"T"	"C"	"A"	"T"	"C"
[2,]	"T"	"G"	"T"	"C"	"C"	"A"	"G"	"T"	"T"	"C"	"A"	"T"	"C"
[3,]	"T"	"G"	"C"	"C"	"C"	"A"	"G"	"T"	"T"	"C"	"A"	"T"	"C"
[4,]	"T"	"G"	"C"	"C"	"C"	"A"	"G"	"T"	"T"	"C"	"A"	"T"	"C"
[5,]	"T"	"G"	"C"	"C"	"C"	"A"	"G"	"T"	"T"	"C"	"A"	"T"	"C"
[6,]	"T"	"G"	"C"	"C"	"C"	"A"	"G"	"T"	"T"	"C"	"A"	"T"	"C"
	[,3309]	[,3310]	[,3311]	[,3312]	[,3313]	[,3314]	[,3315]	[,3316]	[,3317]	[,3318]	[,3319]	[,3320]	[,3321]
[1,]	"C"	"C"	"A"	"A"	"T"	"G"	"G"	"G"	"G"	"G"	"A"	"A"	"G"
[2,]	"C"	"G"	"A"	"A"	"T"	"G"	"G"	"G"	"G"	"G"	"A"	"A"	"G"
[3,]	"C"	"C"	"A"	"A"	"T"	"G"	"G"	"G"	"G"	"G"	"A"	"A"	"G"
[4,]	"C"	"C"	"A"	"A"	"T"	"G"	"G"	"G"	"G"	"G"	"A"	"A"	"G"
[5,]	"C"	"C"	"A"	"A"	"T"	"G"	"G"	"G"	"G"	"G"	"A"	"A"	"G"
[6,]	"C"	"C"	"A"	"A"	"T"	"G"	"G"	"G"	"G"	"G"	"A"	"A"	"G"
	[,3322]	[,3323]	[,3324]	[,3325]	[,3326]	[,3327]	[,3328]	[,3329]	[,3330]	[,3331]	[,3332]	[,3333]	[,3334]
[1,]	"T"	"A"	"T"	"T"	"C"	"C"	"C"	"T"	"T"	"C"	"T"	"T"	"T"
[2,]	"T"	"A"	"T"	"T"	"C"	"C"	"C"	"T"	"T"	"C"	"T"	"T"	"T"
[3,]	"T"	"A"	"T"	"T"	"C"	"C"	"C"	"T"	"T"	"C"	"T"	"T"	"T"
[4,]	"T"	"A"	"C"	"T"	"C"	"C"	"C"	"T"	"T"	"C"	"T"	"T"	"T"
[5,]	"T"	"A"	"T"	"T"	"C"	"C"	"C"	"T"	"T"	"C"	"T"	"T"	"T"
[6,]	"T"	"A"	"T"	"T"	"C"	"C"	"C"	"T"	"T"	"C"	"T"	"T"	"T"
	[,3335]	[,3336]	[,3337]	[,3338]	[,3339]	[,3340]	[,3341]	[,3342]	[,3343]	[,3344]	[,3345]	[,3346]	[,3347]
[1,]	"C"	"C"	"T"	"A"	"C"	"T"	"C"	"T"	"G"	"G"	"G"	"A"	"A"
[2,]	"C"	"C"	"T"	"A"	"C"	"T"	"C"	"T"	"G"	"G"	"G"	"A"	"A"
[3,]	"C"	"C"	"T"	"A"	"C"	"T"	"C"	"T"	"G"	"G"	"G"	"A"	"A"
[4,]	"C"	"C"	"T"	"G"	"C"	"T"	"C"	"T"	"G"	"G"	"G"	"A"	"A"
[5,]	"C"	"C"	"T"	"A"	"C"	"T"	"C"	"T"	"G"	"G"	"G"	"A"	"A"
[6,]	"C"	"C"	"T"	"A"	"C"	"T"	"C"	"T"	"G"	"G"	"G"	"A"	"A"
	[,3348]	[,3349]	[,3350]	[,3351]	[,3352]	[,3353]	[,3354]	[,3355]	[,3356]	[,3357]	[,3358]	[,3359]	[,3360]
[1,]	"G"	"A"	"A"	"T"	"G"	"T"	"C"	"T"	"C"	"C"	"T"	"G"	"C"
[2,]	"G"	"A"	"A"	"T"	"G"	"T"	"C"	"T"	"C"	"C"	"T"	"G"	"C"
[3,]	"G"	"A"	"A"	"T"	"G"	"T"	"C"	"T"	"C"	"C"	"T"	"G"	"C"
[4,]	"G"	"A"	"A"	"T"	"G"	"T"	"C"	"T"	"C"	"C"	"T"	"G"	"C"
[5,]	"G"	"A"	"A"	"T"	"G"	"T"	"C"	"T"	"C"	"C"	"T"	"G"	"C"
[6,]	"G"	"A"	"A"	"T"	"G"	"T"	"C"	"T"	"C"	"C"	"T"	"G"	"C"
	[,3361]	[,3362]	[,3363]	[,3364]	[,3365]	[,3366]	[,3367]	[,3368]	[,3369]	[,3370]	[,3371]	[,3372]	[,3373]
[1,]	"C"	"A"	"C"	"T"	"C"	"C"	"T"	"C"	"A"	"A"	"C"	"T"	"G"
[2,]	"C"	"A"	"C"	"T"	"C"	"C"	"T"	"C"	"A"	"A"	"C"	"T"	"G"
[3,]	"C"	"A"	"C"	"T"	"C"	"C"	"T"	"C"	"A"	"A"	"C"	"T"	"G"
[4,]	"C"	"A"	"C"	"T"	"C"	"C"	"T"	"C"	"A"	"A"	"C"	"T"	"G"
[5,]	"C"	"A"	"C"	"T"	"C"	"C"	"T"	"C"	"A"	"A"	"C"	"T"	"G"
[6,]	"C"	"A"	"C"	"T"	"C"	"C"	"T"	"C"	"A"	"A"	"C"	"T"	"G"
	[,3374]	[,3375]	[,3376]	[,3377]	[,3378]	[,3379]	[,3380]	[,3381]	[,3382]	[,3383]	[,3384]	[,3385]	[,3386]
[1,]	"A"	"T"	"G"	"A"	"T"	"A"	"G"	"A"	"C"	"T"	"T"	"C"	"G"
[2,]	"A"	"T"	"G"	"A"	"T"	"A"	"G"	"A"	"C"	"T"	"T"	"C"	"A"
[3,]	"A"	"T"	"G"	"A"	"T"	"A"	"G"	"A"	"C"	"T"	"T"	"C"	"G"
[4,]	"A"	"T"	"G"	"A"	"T"	"A"	"G"	"A"	"C"	"T"	"T"	"C"	"G"
[5,]	"A"	"T"	"G"	"A"	"T"	"A"	"G"	"A"	"C"	"T"	"T"	"C"	"G"
[6,]	"A"	"T"	"G"	"A"	"T"	"A"	"G"	"A"	"C"	"T"	"T"	"C"	"G"
	[,3387]	[,3388]	[,3389]	[,3390]	[,3391]	[,3392]	[,3393]	[,3394]	[,3395]	[,3396]	[,3397]	[,3398]	[,3399]
[1,]	"A"	"A"	"A"	"A"	"C"	"A"	"G"	"A"	"T"	"G"	"A"	"G"	"A"
[2,]	"A"	"A"	"A"	"A"	"C"	"A"	"G"	"A"	"T"	"G"	"A"	"G"	"A"
[3,]	"A"	"A"	"A"	"A"	"C"	"A"	"G"	"A"	"T"	"G"	"A"	"G"	"A"
[4,]	"A"	"A"	"A"	"A"	"C"	"A"	"G"	"A"	"A"	"G"	"A"	"G"	"A"
[5,]	"A"	"A"	"A"	"A"	"C"	"A"	"G"	"A"	"A"	"G"	"A"	"G"	"A"
[6,]	"A"	"A"	"A"	"A"	"C"	"A"	"G"	"A"	"T"	"G"	"A"	"G"	"A"
	[,3400]	[,3401]	[,3402]	[,3403]	[,3404]	[,3405]	[,3406]	[,3407]	[,3408]	[,3409]	[,3410]	[,3411]	[,3412]
[1,]	"A"	"G"	"A"	"C"	"T"	"A"	"G"	"C"	"A"	"G"	"C"	"T"	"A"
[2,]	"A"	"G"	"A"	"C"	"T"	"A"	"G"	"C"	"A"	"G"	"C"	"T"	"A"
[3,]	"A"	"G"	"A"	"C"	"T"	"A"	"G"	"C"	"A"	"G"	"C"	"T"	"A"
[4,]	"A"	"G"	"A"	"C"	"T"	"A"	"G"	"C"	"A"	"G"	"C"	"T"	"A"



[5,]	"A"	"G"	"A"	"C"	"T"	"A"	"G"	"C"	"A"	"G"	"C"	"T"	"A"
[6,]	"A"	"G"	"A"	"C"	"T"	"A"	"G"	"C"	"A"	"G"	"C"	"T"	"A"
	[,3413]	[,3414]	[,3415]	[,3416]	[,3417]	[,3418]	[,3419]	[,3420]	[,3421]	[,3422]	[,3423]	[,3424]	[,3425]
[1,]	"G"	"C"	"A"	"A"	"G"	"G"	"G"	"T"	"G"	"C"	"T"	"T"	"G"
[2,]	"G"	"C"	"A"	"A"	"G"	"G"	"G"	"T"	"G"	"C"	"T"	"T"	"G"
[3,]	"G"	"C"	"A"	"A"	"G"	"G"	"G"	"T"	"G"	"C"	"T"	"T"	"G"
[4,]	"G"	"C"	"A"	"A"	"G"	"G"	"G"	"T"	"G"	"C"	"T"	"T"	"G"
[5,]	"G"	"C"	"A"	"A"	"G"	"G"	"G"	"T"	"G"	"C"	"T"	"T"	"G"
[6,]	"G"	"C"	"A"	"A"	"G"	"G"	"G"	"T"	"G"	"C"	"T"	"T"	"G"
	[,3426]	[,3427]	[,3428]	[,3429]	[,3430]	[,3431]	[,3432]	[,3433]	[,3434]	[,3435]	[,3436]	[,3437]	[,3438]
[1,]	"T"	"G"	"G"	"T"	"C"	"A"	"C"	"A"	"C"	"T"	"G"	"T"	"G"
[2,]	"T"	"G"	"G"	"T"	"C"	"A"	"C"	"A"	"C"	"T"	"G"	"T"	"G"
[3,]	"T"	"G"	"G"	"T"	"C"	"A"	"C"	"A"	"C"	"T"	"G"	"T"	"G"
[4,]	"T"	"G"	"G"	"T"	"C"	"A"	"C"	"A"	"C"	"T"	"G"	"T"	"G"
[5,]	"T"	"G"	"G"	"T"	"C"	"A"	"C"	"A"	"C"	"T"	"G"	"T"	"G"
[6,]	"T"	"G"	"G"	"T"	"C"	"A"	"C"	"A"	"C"	"T"	"G"	"T"	"G"
	[,3439]	[,3440]	[,3441]	[,3442]	[,3443]	[,3444]	[,3445]	[,3446]	[,3447]	[,3448]	[,3449]	[,3450]	[,3451]
[1,]	"G"	"A"	"A"	"C"	"A"	"C"	"T"	"A"	"A"	"A"	"G"	"A"	"G"
[2,]	"G"	"A"	"A"	"C"	"A"	"C"	"T"	"A"	"A"	"A"	"G"	"A"	"G"
[3,]	"G"	"A"	"A"	"C"	"A"	"C"	"T"	"A"	"A"	"A"	"G"	"A"	"G"
[4,]	"G"	"A"	"A"	"C"	"A"	"C"	"T"	"A"	"A"	"A"	"G"	"A"	"G"
[5,]	"G"	"A"	"A"	"C"	"A"	"C"	"T"	"A"	"A"	"A"	"G"	"A"	"G"
[6,]	"G"	"A"	"A"	"C"	"A"	"C"	"T"	"A"	"A"	"A"	"G"	"A"	"G"
	[,3452]	[,3453]	[,3454]	[,3455]	[,3456]	[,3457]	[,3458]	[,3459]	[,3460]	[,3461]	[,3462]	[,3463]	[,3464]
[1,]	"C"	"T"	"A"	"G"	"G"	"A"	"A"	"A"	"G"	"A"	"G"	"T"	"T"
[2,]	"C"	"T"	"A"	"G"	"G"	"A"	"A"	"A"	"G"	"A"	"G"	"T"	"T"
[3,]	"C"	"T"	"A"	"G"	"G"	"A"	"A"	"A"	"G"	"A"	"G"	"T"	"T"
[4,]	"C"	"T"	"A"	"G"	"G"	"A"	"A"	"A"	"G"	"A"	"C"	"T"	"T"
[5,]	"C"	"T"	"A"	"G"	"G"	"A"	"A"	"A"	"G"	"A"	"G"	"T"	"T"
[6,]	"C"	"T"	"A"	"G"	"G"	"A"	"A"	"A"	"G"	"A"	"G"	"T"	"T"
	[,3465]	[,3466]	[,3467]	[,3468]	[,3469]	[,3470]	[,3471]	[,3472]	[,3473]	[,3474]	[,3475]	[,3476]	[,3477]
[1,]	"G"	"A"	"G"	"C"	"A"	"C"	"A"	"G"	"G"	"C"	"A"	"A"	"C"
[2,]	"G"	"A"	"G"	"C"	"A"	"C"	"A"	"G"	"G"	"C"	"A"	"A"	"C"
[3,]	"G"	"A"	"G"	"C"	"A"	"C"	"A"	"G"	"G"	"C"	"A"	"A"	"C"
[4,]	"G"	"A"	"G"	"C"	"A"	"C"	"A"	"G"	"G"	"C"	"A"	"A"	"C"
[5,]	"G"	"A"	"G"	"C"	"A"	"C"	"A"	"G"	"G"	"C"	"A"	"A"	"C"
[6,]	"G"	"A"	"G"	"C"	"A"	"C"	"A"	"G"	"G"	"C"	"A"	"A"	"C"
	[,3478]	[,3479]	[,3480]	[,3481]	[,3482]	[,3483]	[,3484]	[,3485]	[,3486]	[,3487]	[,3488]	[,3489]	[,3490]
[1,]	"A"	"T"	"T"	"A"	"C"	"A"	"A"	"A"	"C"	"A"	"A"	"A"	"G"
[2,]	"A"	"T"	"T"	"A"	"C"	"A"	"A"	"A"	"C"	"A"	"A"	"A"	"G"
[3,]	"A"	"T"	"T"	"A"	"C"	"A"	"A"	"A"	"C"	"A"	"A"	"A"	"G"
[4,]	"A"	"T"	"T"	"A"	"T"	"A"	"A"	"A"	"C"	"A"	"A"	"A"	"G"
[5,]	"A"	"T"	"T"	"A"	"C"	"A"	"A"	"A"	"C"	"A"	"A"	"A"	"G"
[6,]	"A"	"T"	"T"	"A"	"C"	"A"	"A"	"A"	"C"	"A"	"A"	"A"	"G"
	[,3491]	[,3492]	[,3493]	[,3494]	[,3495]	[,3496]	[,3497]	[,3498]	[,3499]	[,3500]	[,3501]	[,3502]	[,3503]
[1,]	"G"	"A"	"T"	"T"	"T"	"G"	"A"	"A"	"A"	"A"	"C"	"A"	"C"
[2,]	"G"	"A"	"T"	"T"	"T"	"G"	"A"	"A"	"A"	"A"	"C"	"A"	"C"
[3,]	"G"	"A"	"T"	"T"	"T"	"G"	"A"	"A"	"A"	"A"	"C"	"A"	"C"
[4,]	"G"	"A"	"T"	"T"	"T"	"G"	"A"	"A"	"A"	"A"	"C"	"A"	"C"
[5,]	"G"	"A"	"T"	"T"	"T"	"G"	"A"	"A"	"A"	"A"	"C"	"A"	"C"
[6,]	"G"	"A"	"T"	"T"	"T"	"G"	"A"	"A"	"A"	"A"	"C"	"A"	"C"
	[,3504]	[,3505]	[,3506]	[,3507]	[,3508]	[,3509]	[,3510]	[,3511]	[,3512]	[,3513]	[,3514]	[,3515]	[,3516]
[1,]	"C"	"A"	"A"	"G"	"A"	"G"	"T"	"A"	"C"	"A"	"G"	"G"	"T"
[2,]	"C"	"A"	"A"	"G"	"A"	"G"	"T"	"A"	"C"	"A"	"G"	"G"	"T"
[3,]	"C"	"A"	"A"	"G"	"A"	"G"	"T"	"A"	"C"	"A"	"G"	"G"	"T"
[4,]	"C"	"A"	"A"	"G"	"A"	"G"	"T"	"A"	"C"	"A"	"G"	"G"	"T"
[5,]	"C"	"A"	"A"	"G"	"A"	"G"	"T"	"A"	"C"	"A"	"G"	"G"	"A"
[6,]	"C"	"A"	"A"	"G"	"A"	"G"	"T"	"A"	"C"	"A"	"G"	"G"	"T"
	[,3517]	[,3518]	[,3519]	[,3520]	[,3521]	[,3522]	[,3523]	[,3524]	[,3525]	[,3526]	[,3527]	[,3528]	[,3529]
[1,]	"C"	"T"	"T"	"C"	"T"	"T"	"T"	"A"	"A"	"G"	"G"	"A"	"A"
[2,]	"C"	"T"	"T"	"C"	"T"	"T"	"T"	"A"	"A"	"G"	"G"	"A"	"A"
[3,]	"C"	"T"	"T"	"C"	"T"	"T"	"T"	"A"	"A"	"G"	"G"	"A"	"A"
[4,]	"C"	"T"	"T"	"C"	"T"	"T"	"T"	"A"	"A"	"G"	"G"	"A"	"A"
[5,]	"C"	"T"	"T"	"C"	"T"	"T"	"T"	"A"	"A"	"G"	"G"	"A"	"A"
[6,]	"C"	"T"	"T"	"C"	"T"	"T"	"T"	"A"	"A"	"G"	"G"	"A"	"A"
	[,3530]	[,3531]	[,3532]	[,3533]	[,3534]	[,3535]	[,3536]	[,3537]	[,3538]	[,3539]	[,3540]	[,3541]	[,3542]
[1,]	"G"	"A"	"A"	"T"	"A"	"A"	"A"	"A"	"A"	"A"	"G"	"A"	"A"
[2,]	"G"	"A"	"A"	"T"	"A"	"A"	"A"	"A"	"A"	"A"	"G"	"A"	"A"
[3,]	"G"	"A"	"A"	"T"	"A"	"C"	"A"	"A"	"A"	"A"	"G"	"A"	"A"
[4,]	"G"	"A"	"A"	"T"	"A"	"A"	"A"	"A"	"A"	"A"	"G"	"A"	"A"
[5,]	"G"	"A"	"A"	"T"	"A"	"A"	"A"	"A"	"A"	"A"	"G"	"A"	"A"
[6,]	"G"	"A"	"A"	"T"	"A"	"A"	"C"	"A"	"A"	"A"	"G"	"A"	"A"
	[,3543]	[,3544]	[,3545]	[,3546]	[,3547]	[,3548]	[,3549]	[,3550]	[,3551]	[,3552]	[,3553]	[,3554]	[,3555]
[1,]	"G"	"A"	"G"	"G"	"T"	"T"	"C"	"A"	"T"	"T"	"T"	"T"	"T"
[2,]	"G"	"A"	"G"	"G"	"T"	"T"	"C"	"A"	"T"	"T"	"T"	"T"	"T"
[3,]	"G"	"A"	"G"	"G"	"T"	"T"	"C"	"A"	"T"	"T"	"T"	"T"	"T"

[4,]	"G"	"A"	"G"	"G"	"T"	"T"	"C"	"A"	"T"	"T"	"T"	"T"	"T"
[5,]	"G"	"A"	"G"	"G"	"T"	"T"	"C"	"A"	"T"	"T"	"T"	"T"	"T"
[6,]	"G"	"A"	"G"	"G"	"T"	"T"	"C"	"A"	"T"	"T"	"T"	"T"	"T"
	[,3556]	[,3557]	[,3558]	[,3559]	[,3560]	[,3561]	[,3562]	[,3563]	[,3564]	[,3565]	[,3566]	[,3567]	[,3568]
[1,]	"C"	"T"	"G"	"G"	"C"	"T"	"T"	"T"	"T"	"T"	"T"	"T"	"T"
[2,]	"C"	"T"	"G"	"G"	"C"	"T"	"T"	"T"	"T"	"T"	"T"	"T"	"T"
[3,]	"C"	"T"	"G"	"G"	"C"	"T"	"T"	"T"	"T"	"T"	"T"	"T"	"T"
[4,]	"C"	"T"	"G"	"G"	"C"	"T"	"T"	"T"	"T"	"T"	"T"	"T"	"T"
[5,]	"C"	"T"	"G"	"G"	"C"	"T"	"T"	"T"	"T"	"T"	"T"	"T"	"T"
[6,]	"C"	"T"	"G"	"G"	"C"	"T"	"T"	"T"	"C"	"T"	"T"	"T"	"T"
	[,3569]	[,3570]	[,3571]	[,3572]	[,3573]	[,3574]	[,3575]	[,3576]	[,3577]	[,3578]	[,3579]	[,3580]	[,3581]
[1,]	"T"	"T"	"T"	"C"	"A"	"C"	"C"	"T"	"G"	"A"	"A"	"A"	"C"
[2,]	"T"	"T"	"T"	"C"	"A"	"C"	"C"	"T"	"G"	"A"	"A"	"A"	"C"
[3,]	"T"	"T"	"T"	"C"	"A"	"C"	"C"	"T"	"G"	"A"	"A"	"A"	"C"
[4,]	"T"	"C"	"A"	"C"	"C"	"T"	"G"	"A"	"A"	"A"	"C"	"A"	"C"
[5,]	"T"	"C"	"A"	"A"	"C"	"T"	"G"	"A"	"A"	"A"	"C"	"A"	"C"
[6,]	"T"	"T"	"T"	"C"	"A"	"C"	"C"	"T"	"G"	"A"	"A"	"A"	"C"
	[,3582]	[,3583]	[,3584]	[,3585]	[,3586]	[,3587]	[,3588]	[,3589]	[,3590]	[,3591]	[,3592]	[,3593]	[,3594]
[1,]	"A"	"C"	"T"	"T"	"T"	"T"	"C"	"T"	"C"	"T"	"G"	"A"	"G"
[2,]	"A"	"C"	"T"	"T"	"T"	"T"	"C"	"T"	"C"	"C"	"G"	"A"	"G"
[3,]	"A"	"C"	"T"	"T"	"T"	"T"	"C"	"T"	"C"	"C"	"G"	"A"	"G"
[4,]	"T"	"T"	"T"	"T"	"T"	"T"	"C"	"T"	"C"	"T"	"G"	"A"	"G"
[5,]	"T"	"T"	"T"	"T"	"T"	"T"	"C"	"T"	"C"	"T"	"T"	"G"	"A"
[6,]	"A"	"C"	"T"	"T"	"T"	"T"	"C"	"T"	"C"	"C"	"G"	"A"	"G"
	[,3595]	[,3596]	[,3597]	[,3598]	[,3599]	[,3600]	[,3601]	[,3602]	[,3603]	[,3604]	[,3605]	[,3606]	[,3607]
[1,]	"T"	"C"	"C"	"A"	"A"	"A"	"A"	"T"	"C"	"A"	"T"	"T"	"C"
[2,]	"T"	"C"	"C"	"A"	"A"	"A"	"A"	"T"	"C"	"A"	"T"	"T"	"C"
[3,]	"T"	"C"	"C"	"A"	"A"	"A"	"A"	"T"	"C"	"A"	"T"	"T"	"C"
[4,]	"T"	"C"	"C"	"A"	"A"	"A"	"A"	"T"	"C"	"A"	"T"	"T"	"C"
[5,]	"G"	"T"	"C"	"C"	"A"	"A"	"A"	"A"	"T"	"C"	"A"	"T"	"T"
[6,]	"T"	"C"	"C"	"A"	"A"	"A"	"A"	"T"	"C"	"A"	"T"	"G"	"C"
	[,3608]	[,3609]	[,3610]	[,3611]	[,3612]	[,3613]	[,3614]	[,3615]	[,3616]	[,3617]	[,3618]	[,3619]	[,3620]
[1,]	"C"	"C"	"C"	"C"	"C"	"C"	"A"	"T"	"G"	"A"	"A"	"G"	"C"
[2,]	"C"	"C"	"C"	"C"	"C"	"C"	"A"	"T"	"G"	"A"	"A"	"G"	"C"
[3,]	"C"	"C"	"C"	"C"	"C"	"C"	"G"	"T"	"G"	"A"	"A"	"G"	"C"
[4,]	"C"	"C"	"C"	"C"	"C"	"C"	"A"	"T"	"G"	"A"	"A"	"G"	"C"
[5,]	"C"	"C"	"C"	"C"	"C"	"C"	"A"	"T"	"G"	"A"	"A"	"G"	"C"
[6,]	"C"	"C"	"C"	"C"	"C"	"G"	"T"	"G"	"A"	"A"	"G"	"T"	"C"
	[,3621]	[,3622]	[,3623]	[,3624]	[,3625]	[,3626]	[,3627]	[,3628]	[,3629]	[,3630]	[,3631]	[,3632]	[,3633]
[1,]	"T"	"G"	"C"	"T"	"T"	"A"	"C"	"C"	"A"	"A"	"A"	"A"	"C"
[2,]	"T"	"G"	"C"	"T"	"T"	"A"	"C"	"C"	"A"	"A"	"A"	"A"	"C"
[3,]	"T"	"G"	"C"	"T"	"T"	"A"	"C"	"C"	"A"	"A"	"A"	"A"	"C"
[4,]	"T"	"G"	"C"	"T"	"T"	"A"	"C"	"C"	"A"	"A"	"A"	"A"	"C"
[5,]	"T"	"G"	"C"	"T"	"T"	"A"	"C"	"C"	"A"	"A"	"A"	"A"	"C"
[6,]	"T"	"G"	"C"	"T"	"T"	"A"	"C"	"C"	"A"	"A"	"A"	"A"	"C"
	[,3634]	[,3635]	[,3636]	[,3637]	[,3638]	[,3639]	[,3640]	[,3641]	[,3642]	[,3643]	[,3644]	[,3645]	[,3646]
[1,]	"A"	"T"	"A"	"A"	"G"	"A"	"A"	"G"	"A"	"C"	"T"	"T"	"A"
[2,]	"A"	"T"	"A"	"A"	"G"	"A"	"T"	"G"	"A"	"C"	"T"	"T"	"A"
[3,]	"A"	"T"	"A"	"A"	"G"	"A"	"C"	"G"	"A"	"C"	"T"	"T"	"A"
[4,]	"G"	"T"	"A"	"A"	"G"	"A"	"C"	"C"	"A"	"C"	"T"	"T"	"A"
[5,]	"A"	"T"	"A"	"A"	"G"	"A"	"C"	"G"	"A"	"C"	"T"	"T"	"A"
[6,]	"A"	"T"	"A"	"A"	"G"	"A"	"C"	"G"	"A"	"C"	"T"	"T"	"A"
	[,3647]	[,3648]	[,3649]	[,3650]	[,3651]	[,3652]	[,3653]	[,3654]	[,3655]	[,3656]	[,3657]	[,3658]	[,3659]
[1,]	"T"	"A"	"T"	"A"	"T"	"T"	"T"	"G"	"A"	"A"	"A"	"G"	"A"
[2,]	"T"	"A"	"T"	"A"	"T"	"T"	"T"	"G"	"A"	"A"	"A"	"G"	"A"
[3,]	"T"	"A"	"T"	"A"	"T"	"T"	"T"	"G"	"A"	"A"	"A"	"G"	"A"
[4,]	"T"	"A"	"T"	"A"	"T"	"T"	"T"	"G"	"A"	"A"	"A"	"G"	"A"
[5,]	"T"	"A"	"T"	"A"	"T"	"T"	"T"	"G"	"A"	"A"	"G"	"G"	"A"
[6,]	"T"	"A"	"T"	"A"	"T"	"T"	"T"	"G"	"A"	"A"	"G"	"G"	"A"
	[,3660]	[,3661]	[,3662]	[,3663]	[,3664]	[,3665]	[,3666]	[,3667]	[,3668]	[,3669]	[,3670]	[,3671]	[,3672]
[1,]	"A"	"G"	"T"	"C"	"A"	"A"	"A"	"T"	"G"	"A"	"A"	"T"	"G"
[2,]	"A"	"G"	"T"	"C"	"A"	"A"	"A"	"T"	"G"	"A"	"A"	"T"	"G"
[3,]	"A"	"G"	"T"	"C"	"A"	"A"	"A"	"T"	"G"	"A"	"A"	"T"	"G"
[4,]	"A"	"G"	"T"	"C"	"A"	"A"	"A"	"T"	"G"	"A"	"A"	"T"	"G"
[5,]	"A"	"G"	"T"	"C"	"A"	"A"	"A"	"T"	"G"	"A"	"A"	"T"	"G"
[6,]	"A"	"G"	"T"	"C"	"A"	"A"	"A"	"T"	"G"	"A"	"A"	"T"	"G"
	[,3673]	[,3674]	[,3675]	[,3676]	[,3677]	[,3678]	[,3679]	[,3680]	[,3681]	[,3682]	[,3683]	[,3684]	[,3685]
[1,]	"A"	"G"	"T"	"C"	"T"	"T"	"C"	"T"	"A"	"A"	"T"	"A"	"G"
[2,]	"A"	"G"	"T"	"C"	"T"	"T"	"C"	"T"	"A"	"A"	"T"	"A"	"G"
[3,]	"A"	"G"	"T"	"C"	"T"	"T"	"C"	"T"	"A"	"A"	"T"	"A"	"G"
[4,]	"A"	"G"	"T"	"C"	"T"	"T"	"C"	"T"	"A"	"A"	"T"	"A"	"G"
[5,]	"A"	"G"	"T"	"C"	"T"	"T"	"C"	"T"	"A"	"A"	"C"	"A"	"G"
[6,]	"A"	"G"	"T"	"C"	"T"	"T"	"C"	"T"	"A"	"A"	"T"	"A"	"G"
	[,3686]	[,3687]	[,3688]	[,3689]	[,3690]	[,3691]	[,3692]	[,3693]	[,3694]	[,3695]	[,3696]	[,3697]	[,3698]
[1,]	"A"	"A"	"G"	"T"	"C"	"C"	"A"	"T"	"G"	"A"	"G"	"T"	"T"
[2,]	"A"	"A"	"G"	"T"	"C"	"C"	"A"	"T"	"G"	"A"	"G"	"T"	"T"

[3,]	"A"	"A"	"G"	"T"	"C"	"C"	"A"	"T"	"G"	"A"	"G"	"T"	"T"
[4,]	"A"	"A"	"G"	"T"	"C"	"C"	"G"	"T"	"G"	"A"	"G"	"T"	"T"
[5,]	"A"	"A"	"G"	"T"	"G"	"C"	"A"	"T"	"G"	"A"	"G"	"T"	"T"
[6,]	"A"	"A"	"G"	"T"	"C"	"C"	"A"	"T"	"G"	"A"	"G"	"T"	"T"
	[,3699]	[,3700]	[,3701]	[,3702]	[,3703]	[,3704]	[,3705]	[,3706]	[,3707]	[,3708]	[,3709]	[,3710]	[,3711]
[1,]	"G"	"A"	"G"	"T"	"G"	"G"	"G"	"T"	"A"	"T"	"T"	"T"	"C"
[2,]	"G"	"A"	"G"	"T"	"G"	"G"	"G"	"T"	"A"	"T"	"T"	"T"	"C"
[3,]	"G"	"A"	"G"	"T"	"G"	"G"	"G"	"T"	"A"	"T"	"T"	"T"	"C"
[4,]	"G"	"A"	"G"	"T"	"G"	"G"	"G"	"T"	"A"	"T"	"T"	"T"	"C"
[5,]	"G"	"A"	"G"	"T"	"G"	"G"	"G"	"T"	"A"	"T"	"T"	"T"	"C"
[6,]	"G"	"A"	"G"	"T"	"G"	"G"	"G"	"T"	"A"	"T"	"T"	"T"	"C"
	[,3712]	[,3713]	[,3714]	[,3715]	[,3716]	[,3717]	[,3718]	[,3719]	[,3720]	[,3721]	[,3722]	[,3723]	[,3724]
[1,]	"T"	"T"	"A"	"T"	"T"	"T"	"G"	"A"	"A"	"A"	"G"	"T"	"G"
[2,]	"T"	"T"	"A"	"T"	"T"	"T"	"G"	"A"	"A"	"A"	"G"	"T"	"G"
[3,]	"T"	"T"	"A"	"T"	"T"	"T"	"G"	"A"	"A"	"A"	"G"	"T"	"G"
[4,]	"T"	"T"	"A"	"T"	"T"	"T"	"G"	"A"	"A"	"A"	"G"	"T"	"G"
[5,]	"T"	"T"	"A"	"T"	"C"	"T"	"G"	"A"	"A"	"A"	"G"	"T"	"G"
[6,]	"T"	"T"	"A"	"T"	"T"	"T"	"G"	"A"	"A"	"A"	"G"	"T"	"G"
	[,3725]	[,3726]	[,3727]	[,3728]	[,3729]	[,3730]	[,3731]	[,3732]	[,3733]	[,3734]	[,3735]	[,3736]	[,3737]
[1,]	"T"	"T"	"T"	"T"	"T"	"C"	"T"	"T"	"T"	"A"	"A"	"T"	"C"
[2,]	"T"	"T"	"T"	"T"	"T"	"C"	"T"	"T"	"T"	"A"	"A"	"C"	"C"
[3,]	"T"	"T"	"T"	"T"	"T"	"C"	"T"	"T"	"T"	"A"	"A"	"T"	"C"
[4,]	"T"	"T"	"T"	"T"	"T"	"C"	"T"	"T"	"T"	"A"	"A"	"T"	"C"
[5,]	"T"	"T"	"T"	"T"	"T"	"C"	"T"	"T"	"T"	"A"	"A"	"T"	"C"
[6,]	"T"	"T"	"T"	"T"	"T"	"C"	"T"	"T"	"T"	"A"	"A"	"T"	"C"
	[,3738]	[,3739]	[,3740]	[,3741]	[,3742]	[,3743]	[,3744]	[,3745]	[,3746]	[,3747]	[,3748]	[,3749]	[,3750]
[1,]	"A"	"A"	"A"	"A"	"G"	"T"	"C"	"C"	"T"	"T"	"A"	"G"	"A"
[2,]	"A"	"A"	"A"	"A"	"G"	"T"	"C"	"C"	"T"	"T"	"A"	"G"	"A"
[3,]	"A"	"A"	"A"	"A"	"G"	"T"	"C"	"C"	"T"	"T"	"A"	"G"	"A"
[4,]	"A"	"A"	"A"	"A"	"G"	"T"	"C"	"C"	"T"	"T"	"A"	"G"	"A"
[5,]	"A"	"A"	"A"	"A"	"G"	"T"	"C"	"C"	"T"	"T"	"A"	"G"	"A"
[6,]	"A"	"A"	"A"	"A"	"G"	"T"	"C"	"C"	"T"	"T"	"A"	"G"	"A"
	[,3751]	[,3752]	[,3753]	[,3754]	[,3755]	[,3756]	[,3757]	[,3758]	[,3759]	[,3760]	[,3761]	[,3762]	[,3763]
[1,]	"A"	"T"	"G"	"A"	"G"	"G"	"G"	"A"	"A"	"A"	"C"	"A"	"A"
[2,]	"A"	"T"	"G"	"A"	"G"	"G"	"G"	"A"	"A"	"A"	"C"	"A"	"A"
[3,]	"A"	"T"	"G"	"A"	"G"	"G"	"G"	"A"	"A"	"A"	"C"	"A"	"A"
[4,]	"A"	"C"	"G"	"A"	"G"	"A"	"G"	"A"	"A"	"A"	"C"	"A"	"A"
[5,]	"A"	"T"	"G"	"A"	"G"	"G"	"A"	"A"	"A"	"A"	"C"	"A"	"A"
[6,]	"A"	"T"	"G"	"A"	"G"	"G"	"G"	"A"	"A"	"A"	"C"	"A"	"A"
	[,3764]	[,3765]	[,3766]	[,3767]	[,3768]	[,3769]	[,3770]	[,3771]	[,3772]	[,3773]	[,3774]	[,3775]	[,3776]
[1,]	"A"	"A"	"T"	"A"	"T"	"T"	"T"	"A"	"T"	"T"	"T"	"G"	"T"
[2,]	"A"	"A"	"T"	"A"	"T"	"T"	"T"	"A"	"T"	"T"	"T"	"G"	"T"
[3,]	"A"	"A"	"T"	"A"	"T"	"T"	"T"	"A"	"T"	"T"	"T"	"G"	"T"
[4,]	"A"	"A"	"T"	"A"	"T"	"T"	"T"	"A"	"T"	"T"	"T"	"G"	"T"
[5,]	"A"	"A"	"T"	"A"	"T"	"T"	"T"	"A"	"T"	"T"	"T"	"G"	"T"
[6,]	"A"	"A"	"T"	"A"	"T"	"T"	"T"	"A"	"T"	"T"	"T"	"G"	"T"
	[,3777]	[,3778]	[,3779]	[,3780]	[,3781]	[,3782]	[,3783]	[,3784]	[,3785]	[,3786]	[,3787]	[,3788]	[,3789]
[1,]	"T"	"T"	"T"	"G"	"G"	"A"	"A"	"T"	"C"	"C"	"C"	"A"	"C"
[2,]	"T"	"T"	"T"	"G"	"G"	"A"	"A"	"T"	"C"	"C"	"C"	"A"	"C"
[3,]	"T"	"T"	"T"	"G"	"G"	"A"	"A"	"T"	"C"	"C"	"C"	"A"	"C"
[4,]	"T"	"T"	"T"	"G"	"G"	"A"	"A"	"T"	"C"	"C"	"C"	"A"	"C"
[5,]	"T"	"T"	"T"	"G"	"G"	"A"	"A"	"T"	"C"	"C"	"C"	"A"	"C"
[6,]	"T"	"T"	"T"	"G"	"G"	"A"	"A"	"T"	"C"	"C"	"C"	"A"	"C"
	[,3790]	[,3791]	[,3792]	[,3793]	[,3794]	[,3795]	[,3796]	[,3797]	[,3798]	[,3799]	[,3800]	[,3801]	[,3802]
[1,]	"T"	"T"	"A"	"T"	"C"	"A"	"A"	"A"	"T"	"C"	"A"	"T"	"T"
[2,]	"T"	"T"	"A"	"T"	"C"	"A"	"A"	"A"	"T"	"C"	"A"	"T"	"T"
[3,]	"T"	"T"	"A"	"T"	"C"	"A"	"A"	"A"	"T"	"C"	"A"	"T"	"T"
[4,]	"T"	"T"	"A"	"A"	"C"	"A"	"A"	"A"	"T"	"C"	"A"	"T"	"T"
[5,]	"T"	"T"	"A"	"T"	"C"	"A"	"A"	"A"	"T"	"A"	"A"	"T"	"T"
[6,]	"T"	"T"	"A"	"T"	"C"	"A"	"A"	"A"	"T"	"C"	"A"	"T"	"T"
	[,3803]	[,3804]	[,3805]	[,3806]	[,3807]	[,3808]	[,3809]	[,3810]	[,3811]	[,3812]	[,3813]	[,3814]	[,3815]
[1,]	"C"	"A"	"A"	"A"	"A"	"C"	"T"	"T"	"T"	"C"	"A"	"G"	"C"
[2,]	"C"	"A"	"A"	"A"	"A"	"C"	"T"	"T"	"T"	"C"	"A"	"G"	"C"
[3,]	"C"	"A"	"A"	"A"	"A"	"C"	"T"	"T"	"T"	"C"	"A"	"G"	"C"
[4,]	"C"	"A"	"A"	"A"	"A"	"C"	"T"	"T"	"T"	"C"	"A"	"G"	"C"
[5,]	"C"	"A"	"A"	"A"	"A"	"C"	"T"	"T"	"T"	"C"	"A"	"G"	"C"
[6,]	"C"	"A"	"A"	"A"	"A"	"C"	"T"	"T"	"T"	"C"	"A"	"G"	"C"
	[,3816]	[,3817]	[,3818]	[,3819]	[,3820]	[,3821]	[,3822]	[,3823]	[,3824]	[,3825]	[,3826]	[,3827]	[,3828]
[1,]	"T"	"G"	"G"	"A"	"G"	"T"	"G"	"G"	"G"	"G"	"T"	"T"	"T"
[2,]	"T"	"G"	"G"	"A"	"G"	"T"	"G"	"G"	"G"	"G"	"T"	"T"	"T"
[3,]	"T"	"G"	"G"	"A"	"G"	"T"	"G"	"G"	"G"	"G"	"T"	"T"	"T"
[4,]	"T"	"G"	"G"	"A"	"G"	"T"	"G"	"G"	"G"	"G"	"T"	"T"	"T"
[5,]	"T"	"G"	"G"	"A"	"G"	"T"	"G"	"G"	"G"	"G"	"T"	"T"	"T"
[6,]	"T"	"G"	"G"	"A"	"G"	"T"	"G"	"G"	"G"	"G"	"T"	"T"	"T"
	[,3829]	[,3830]	[,3831]	[,3832]	[,3833]	[,3834]	[,3835]	[,3836]	[,3837]	[,3838]	[,3839]	[,3840]	[,3841]
[1,]	"G"	"C"	"T"	"T"	"T"	"T"	"G"	"T"	"T"	"T"	"T"	"G"	"T"

[2,]	"G"	"C"	"T"	"T"	"T"	"T"	"G"	"T"	"T"	"T"	"T"	"G"	"T"
[3,]	"G"	"T"	"T"	"T"	"T"	"T"	"G"	"T"	"T"	"T"	"T"	"G"	"T"
[4,]	"G"	"C"	"T"	"T"	"T"	"T"	"G"	"T"	"T"	"T"	"T"	"G"	"T"
[5,]	"G"	"C"	"T"	"T"	"T"	"T"	"G"	"T"	"T"	"T"	"T"	"G"	"T"
[6,]	"G"	"C"	"T"	"T"	"T"	"T"	"G"	"T"	"T"	"T"	"T"	"G"	"T"
	[,3842]	[,3843]	[,3844]	[,3845]	[,3846]	[,3847]	[,3848]	[,3849]	[,3850]	[,3851]	[,3852]	[,3853]	[,3854]
[1,]	"T"	"T"	"G"	"T"	"G"	"T"	"C"	"C"	"A"	"T"	"A"	"A"	"G"
[2,]	"T"	"T"	"G"	"T"	"G"	"T"	"C"	"C"	"A"	"T"	"A"	"A"	"G"
[3,]	"T"	"T"	"G"	"T"	"G"	"T"	"C"	"C"	"A"	"T"	"A"	"A"	"G"
[4,]	"T"	"T"	"G"	"T"	"G"	"T"	"C"	"C"	"G"	"T"	"A"	"A"	"G"
[5,]	"T"	"T"	"G"	"T"	"G"	"T"	"C"	"C"	"A"	"T"	"A"	"A"	"G"
[6,]	"T"	"T"	"G"	"T"	"G"	"T"	"C"	"C"	"A"	"T"	"A"	"A"	"G"
	[,3855]	[,3856]	[,3857]	[,3858]	[,3859]	[,3860]	[,3861]	[,3862]	[,3863]	[,3864]	[,3865]	[,3866]	[,3867]
[1,]	"A"	"G"	"A"	"A"	"A"	"T"	"G"	"G"	"T"	"A"	"G"	"A"	"A"
[2,]	"A"	"G"	"A"	"A"	"A"	"T"	"G"	"G"	"T"	"A"	"G"	"A"	"A"
[3,]	"A"	"G"	"A"	"A"	"A"	"T"	"G"	"G"	"T"	"A"	"G"	"A"	"A"
[4,]	"A"	"G"	"A"	"A"	"A"	"T"	"G"	"G"	"T"	"A"	"G"	"A"	"A"
[5,]	"A"	"C"	"A"	"A"	"A"	"T"	"G"	"G"	"T"	"A"	"G"	"A"	"A"
[6,]	"A"	"G"	"A"	"A"	"A"	"T"	"G"	"G"	"T"	"A"	"G"	"A"	"A"
	[,3868]	[,3869]	[,3870]	[,3871]	[,3872]	[,3873]	[,3874]	[,3875]	[,3876]	[,3877]	[,3878]	[,3879]	[,3880]
[1,]	"G"	"A"	"T"	"G"	"A"	"A"	"T"	"C"	"A"	"G"	"T"	"A"	"T"
[2,]	"G"	"A"	"T"	"G"	"A"	"A"	"T"	"C"	"A"	"G"	"T"	"A"	"T"
[3,]	"G"	"A"	"T"	"G"	"A"	"A"	"T"	"C"	"A"	"G"	"T"	"A"	"T"
[4,]	"G"	"A"	"C"	"G"	"A"	"A"	"T"	"C"	"A"	"G"	"T"	"A"	"C"
[5,]	"G"	"A"	"T"	"G"	"A"	"A"	"T"	"C"	"A"	"G"	"T"	"A"	"T"
[6,]	"G"	"A"	"T"	"G"	"A"	"A"	"T"	"C"	"A"	"G"	"T"	"A"	"T"
	[,3881]	[,3882]	[,3883]	[,3884]	[,3885]	[,3886]	[,3887]	[,3888]	[,3889]	[,3890]	[,3891]	[,3892]	[,3893]
[1,]	"G"	"A"	"A"	"G"	"A"	"C"	"A"	"C"	"T"	"G"	"T"	"C"	"A"
[2,]	"G"	"A"	"A"	"G"	"A"	"A"	"A"	"C"	"T"	"G"	"T"	"C"	"A"
[3,]	"G"	"A"	"A"	"G"	"A"	"C"	"A"	"C"	"T"	"G"	"T"	"C"	"A"
[4,]	"G"	"A"	"A"	"G"	"A"	"C"	"A"	"C"	"T"	"G"	"T"	"C"	"A"
[5,]	"G"	"A"	"A"	"G"	"A"	"C"	"A"	"C"	"T"	"G"	"T"	"C"	"A"
[6,]	"G"	"A"	"A"	"G"	"A"	"C"	"A"	"C"	"T"	"G"	"T"	"C"	"A"
	[,3894]	[,3895]	[,3896]	[,3897]	[,3898]	[,3899]	[,3900]	[,3901]	[,3902]	[,3903]	[,3904]	[,3905]	[,3906]
[1,]	"A"	"T"	"G"	"A"	"G"	"G"	"T"	"T"	"A"	"T"	"G"	"A"	"G"
[2,]	"A"	"T"	"G"	"A"	"G"	"G"	"T"	"T"	"A"	"T"	"G"	"A"	"G"
[3,]	"A"	"T"	"G"	"A"	"G"	"G"	"T"	"T"	"A"	"T"	"G"	"A"	"G"
[4,]	"A"	"T"	"G"	"A"	"G"	"G"	"T"	"T"	"A"	"T"	"G"	"A"	"G"
[5,]	"A"	"T"	"G"	"A"	"G"	"G"	"T"	"T"	"A"	"T"	"G"	"A"	"G"
[6,]	"A"	"T"	"G"	"A"	"G"	"G"	"T"	"T"	"A"	"T"	"G"	"A"	"G"
	[,3907]	[,3908]	[,3909]	[,3910]	[,3911]	[,3912]	[,3913]	[,3914]	[,3915]	[,3916]	[,3917]	[,3918]	[,3919]
[1,]	"A"	"A"	"A"	"A"	"A"	"A"	"A"	"C"	"A"	"G"	"C"	"A"	"G"
[2,]	"A"	"A"	"A"	"A"	"_"	"A"	"A"	"C"	"A"	"G"	"C"	"A"	"G"
[3,]	"A"	"A"	"A"	"A"	"_"	"A"	"A"	"C"	"A"	"G"	"C"	"A"	"G"
[4,]	"A"	"A"	"A"	"A"	"_"	"A"	"A"	"C"	"A"	"G"	"C"	"A"	"G"
[5,]	"A"	"A"	"G"	"A"	"_"	"A"	"A"	"C"	"A"	"G"	"C"	"A"	"G"
[6,]	"A"	"A"	"A"	"A"	"_"	"A"	"A"	"C"	"A"	"G"	"C"	"A"	"G"
	[,3920]	[,3921]	[,3922]	[,3923]	[,3924]	[,3925]	[,3926]	[,3927]	[,3928]	[,3929]	[,3930]	[,3931]	[,3932]
[1,]	"G"	"G"	"G"	"C"	"A"	"T"	"T"	"A"	"G"	"T"	"T"	"T"	"C"
[2,]	"G"	"G"	"G"	"C"	"A"	"T"	"T"	"A"	"G"	"T"	"T"	"T"	"C"
[3,]	"G"	"G"	"G"	"C"	"A"	"T"	"T"	"A"	"G"	"T"	"T"	"T"	"C"
[4,]	"G"	"G"	"G"	"C"	"A"	"T"	"T"	"A"	"G"	"T"	"T"	"T"	"C"
[5,]	"G"	"G"	"G"	"C"	"A"	"T"	"T"	"A"	"G"	"T"	"T"	"T"	"C"
[6,]	"G"	"G"	"G"	"C"	"A"	"T"	"T"	"A"	"G"	"T"	"T"	"T"	"C"
	[,3933]	[,3934]	[,3935]	[,3936]	[,3937]	[,3938]	[,3939]	[,3940]	[,3941]	[,3942]	[,3943]	[,3944]	[,3945]
[1,]	"A"	"G"	"G"	"C"	"A"	"A"	"G"	"G"	"C"	"A"	"G"	"C"	"T"
[2,]	"A"	"G"	"G"	"C"	"A"	"A"	"G"	"G"	"C"	"A"	"G"	"C"	"T"
[3,]	"A"	"G"	"G"	"C"	"A"	"A"	"G"	"G"	"C"	"A"	"G"	"C"	"T"
[4,]	"A"	"G"	"G"	"C"	"A"	"A"	"G"	"G"	"C"	"A"	"G"	"C"	"T"
[5,]	"A"	"G"	"G"	"C"	"A"	"A"	"G"	"G"	"C"	"A"	"G"	"C"	"T"
[6,]	"A"	"G"	"G"	"C"	"A"	"A"	"G"	"G"	"C"	"A"	"G"	"C"	"T"
	[,3946]	[,3947]	[,3948]	[,3949]	[,3950]	[,3951]	[,3952]	[,3953]	[,3954]	[,3955]	[,3956]	[,3957]	[,3958]
[1,]	"C"	"C"	"C"	"A"	"G"	"G"	"T"	"T"	"T"	"A"	"G"	"A"	"G"
[2,]	"C"	"C"	"C"	"A"	"G"	"G"	"T"	"T"	"T"	"A"	"G"	"A"	"G"
[3,]	"C"	"C"	"C"	"A"	"G"	"G"	"T"	"T"	"T"	"A"	"G"	"A"	"G"
[4,]	"C"	"C"	"C"	"A"	"G"	"G"	"T"	"T"	"T"	"A"	"G"	"A"	"G"
[5,]	"C"	"C"	"C"	"A"	"G"	"G"	"T"	"T"	"T"	"A"	"G"	"A"	"G"
[6,]	"C"	"C"	"C"	"A"	"G"	"G"	"T"	"T"	"T"	"A"	"G"	"A"	"G"
	[,3959]	[,3960]	[,3961]	[,3962]	[,3963]	[,3964]	[,3965]	[,3966]	[,3967]	[,3968]	[,3969]	[,3970]	[,3971]
[1,]	"A"	"T"	"T"	"A"	"A"	"T"	"T"	"T"	"T"	"T"	"A"	"C"	"C"
[2,]	"A"	"T"	"T"	"A"	"A"	"T"	"T"	"T"	"T"	"T"	"A"	"C"	"C"
[3,]	"A"	"T"	"T"	"A"	"A"	"T"	"T"	"T"	"T"	"T"	"A"	"C"	"C"
[4,]	"A"	"T"	"T"	"A"	"A"	"T"	"T"	"T"	"T"	"T"	"A"	"C"	"C"
[5,]	"A"	"T"	"T"	"A"	"A"	"T"	"T"	"T"	"T"	"T"	"A"	"T"	"C"
[6,]	"A"	"T"	"T"	"A"	"A"	"T"	"T"	"T"	"T"	"T"	"A"	"C"	"C"
	[,3972]	[,3973]	[,3974]	[,3975]	[,3976]	[,3977]	[,3978]	[,3979]	[,3980]	[,3981]	[,3982]	[,3983]	[,3984]

[1,]	"C"	"C"	"C"	"T"	"A"	"A"	"G"	"G"	"A"	"A"	"T"	"A"	"T"
[2,]	"C"	"C"	"C"	"T"	"A"	"A"	"G"	"G"	"A"	"A"	"T"	"A"	"T"
[3,]	"C"	"C"	"C"	"T"	"A"	"A"	"G"	"G"	"A"	"A"	"T"	"A"	"T"
[4,]	"C"	"C"	"C"	"T"	"A"	"A"	"G"	"G"	"A"	"A"	"T"	"A"	"T"
[5,]	"C"	"C"	"C"	"T"	"A"	"A"	"G"	"G"	"A"	"A"	"T"	"A"	"T"
[6,]	"C"	"C"	"C"	"T"	"A"	"A"	"G"	"G"	"A"	"A"	"T"	"A"	"T"
	[,3985]	[,3986]	[,3987]	[,3988]	[,3989]	[,3990]	[,3991]	[,3992]	[,3993]	[,3994]	[,3995]	[,3996]	[,3997]
[1,]	"C"	"C"	"A"	"G"	"T"	"C"	"A"	"A"	"A"	"G"	"A"	"C"	"G"
[2,]	"C"	"C"	"A"	"G"	"T"	"C"	"A"	"A"	"A"	"G"	"A"	"C"	"G"
[3,]	"C"	"C"	"A"	"G"	"T"	"C"	"A"	"A"	"A"	"G"	"A"	"C"	"G"
[4,]	"C"	"C"	"A"	"G"	"T"	"C"	"A"	"A"	"A"	"G"	"A"	"C"	"G"
[5,]	"C"	"C"	"A"	"G"	"T"	"C"	"A"	"A"	"A"	"G"	"A"	"C"	"G"
[6,]	"C"	"C"	"A"	"G"	"T"	"C"	"A"	"A"	"A"	"G"	"A"	"C"	"G"
	[,3998]	[,3999]	[,4000]	[,4001]	[,4002]	[,4003]	[,4004]	[,4005]	[,4006]	[,4007]	[,4008]	[,4009]	[,4010]
[1,]	"C"	"T"	"G"	"A"	"G"	"T"	"G"	"G"	"G"	"A"	"G"	"C"	"T"
[2,]	"C"	"T"	"G"	"A"	"G"	"T"	"G"	"G"	"G"	"A"	"G"	"C"	"T"
[3,]	"C"	"T"	"G"	"A"	"G"	"T"	"G"	"G"	"G"	"A"	"G"	"C"	"T"
[4,]	"C"	"T"	"G"	"A"	"G"	"T"	"G"	"G"	"G"	"A"	"G"	"C"	"T"
[5,]	"C"	"T"	"G"	"A"	"G"	"T"	"G"	"G"	"G"	"A"	"G"	"C"	"T"
[6,]	"C"	"T"	"G"	"A"	"G"	"T"	"G"	"G"	"G"	"A"	"G"	"C"	"T"
	[,4011]	[,4012]	[,4013]	[,4014]	[,4015]	[,4016]	[,4017]	[,4018]	[,4019]	[,4020]	[,4021]	[,4022]	[,4023]
[1,]	"G"	"T"	"C"	"A"	"G"	"G"	"C"	"A"	"G"	"T"	"A"	"G"	"C"
[2,]	"G"	"T"	"C"	"A"	"G"	"G"	"C"	"A"	"G"	"T"	"A"	"G"	"C"
[3,]	"G"	"T"	"C"	"A"	"G"	"G"	"C"	"A"	"G"	"T"	"A"	"G"	"C"
[4,]	"G"	"T"	"C"	"A"	"G"	"G"	"C"	"A"	"G"	"T"	"A"	"G"	"C"
[5,]	"G"	"T"	"C"	"A"	"G"	"G"	"C"	"A"	"G"	"T"	"A"	"G"	"C"
[6,]	"G"	"T"	"C"	"A"	"G"	"G"	"C"	"A"	"G"	"T"	"A"	"G"	"C"
	[,4024]	[,4025]	[,4026]	[,4027]	[,4028]	[,4029]	[,4030]	[,4031]	[,4032]	[,4033]	[,4034]	[,4035]	[,4036]
[1,]	"A"	"G"	"C"	"T"	"G"	"T"	"G"	"T"	"T"	"T"	"G"	"A"	"G"
[2,]	"A"	"G"	"C"	"T"	"G"	"T"	"G"	"T"	"T"	"T"	"G"	"A"	"G"
[3,]	"A"	"G"	"C"	"T"	"G"	"T"	"G"	"T"	"T"	"T"	"G"	"A"	"G"
[4,]	"A"	"G"	"C"	"T"	"G"	"T"	"G"	"T"	"T"	"T"	"G"	"A"	"G"
[5,]	"A"	"G"	"C"	"T"	"G"	"T"	"G"	"T"	"T"	"T"	"G"	"A"	"G"
[6,]	"A"	"G"	"C"	"T"	"G"	"T"	"G"	"T"	"T"	"T"	"G"	"A"	"G"
	[,4037]	[,4038]	[,4039]	[,4040]	[,4041]	[,4042]	[,4043]	[,4044]	[,4045]	[,4046]	[,4047]	[,4048]	[,4049]
[1,]	"T"	"T"	"T"	"C"	"T"	"G"	"G"	"C"	"T"	"G"	"A"	"A"	"A"
[2,]	"T"	"T"	"T"	"C"	"T"	"G"	"G"	"C"	"T"	"G"	"A"	"A"	"A"
[3,]	"T"	"T"	"T"	"C"	"T"	"G"	"G"	"C"	"T"	"G"	"A"	"A"	"A"
[4,]	"T"	"T"	"T"	"C"	"T"	"G"	"G"	"C"	"T"	"G"	"A"	"A"	"A"
[5,]	"T"	"T"	"T"	"C"	"T"	"G"	"G"	"C"	"T"	"G"	"A"	"A"	"A"
[6,]	"T"	"T"	"T"	"C"	"T"	"G"	"G"	"C"	"T"	"G"	"A"	"A"	"A"
	[,4050]	[,4051]	[,4052]	[,4053]	[,4054]	[,4055]	[,4056]	[,4057]	[,4058]	[,4059]	[,4060]	[,4061]	[,4062]
[1,]	"A"	"T"	"G"	"G"	"T"	"G"	"A"	"A"	"G"	"A"	"A"	"T"	"G"
[2,]	"A"	"T"	"G"	"G"	"T"	"G"	"A"	"A"	"G"	"A"	"A"	"T"	"G"
[3,]	"A"	"T"	"G"	"G"	"T"	"G"	"A"	"A"	"G"	"A"	"A"	"T"	"G"
[4,]	"A"	"T"	"G"	"G"	"T"	"G"	"A"	"A"	"G"	"A"	"A"	"T"	"G"
[5,]	"A"	"T"	"G"	"G"	"T"	"G"	"A"	"A"	"G"	"A"	"A"	"T"	"G"
[6,]	"A"	"T"	"G"	"G"	"T"	"G"	"A"	"A"	"G"	"A"	"A"	"T"	"G"
	[,4063]	[,4064]	[,4065]	[,4066]	[,4067]	[,4068]	[,4069]	[,4070]	[,4071]	[,4072]	[,4073]	[,4074]	[,4075]
[1,]	"G"	"A"	"T"	"T"	"T"	"A"	"A"	"T"	"T"	"A"	"T"	"G"	"C"
[2,]	"G"	"A"	"T"	"T"	"T"	"A"	"A"	"T"	"T"	"A"	"T"	"G"	"C"
[3,]	"G"	"A"	"T"	"T"	"T"	"A"	"A"	"T"	"T"	"A"	"T"	"G"	"C"
[4,]	"G"	"A"	"T"	"T"	"T"	"A"	"A"	"T"	"T"	"A"	"T"	"G"	"C"
[5,]	"G"	"A"	"T"	"T"	"T"	"A"	"A"	"T"	"T"	"A"	"T"	"G"	"C"
[6,]	"G"	"A"	"T"	"T"	"T"	"A"	"A"	"T"	"T"	"A"	"T"	"G"	"C"
	[,4076]	[,4077]	[,4078]	[,4079]	[,4080]	[,4081]	[,4082]	[,4083]	[,4084]	[,4085]	[,4086]	[,4087]	[,4088]
[1,]	"T"	"A"	"A"	"C"	"A"	"A"	"A"	"C"	"T"	"G"	"A"	"A"	"A"
[2,]	"T"	"A"	"A"	"C"	"A"	"A"	"A"	"C"	"T"	"G"	"A"	"A"	"A"
[3,]	"T"	"A"	"A"	"C"	"A"	"A"	"A"	"C"	"T"	"G"	"A"	"A"	"A"
[4,]	"T"	"A"	"A"	"C"	"A"	"A"	"A"	"C"	"T"	"G"	"A"	"A"	"A"
[5,]	"T"	"A"	"A"	"C"	"A"	"A"	"A"	"C"	"T"	"G"	"A"	"A"	"A"
[6,]	"T"	"A"	"A"	"C"	"A"	"A"	"A"	"C"	"T"	"G"	"A"	"A"	"A"
	[,4089]	[,4090]	[,4091]	[,4092]	[,4093]	[,4094]	[,4095]	[,4096]	[,4097]	[,4098]	[,4099]	[,4100]	[,4101]
[1,]	"A"	"A"	"T"	"C"	"T"	"A"	"G"	"A"	"C"	"A"	"T"	"A"	"G"
[2,]	"A"	"A"	"T"	"C"	"T"	"A"	"G"	"A"	"C"	"A"	"T"	"A"	"G"
[3,]	"A"	"A"	"T"	"C"	"T"	"A"	"G"	"A"	"C"	"A"	"T"	"A"	"G"
[4,]	"A"	"A"	"T"	"C"	"T"	"A"	"G"	"A"	"C"	"A"	"T"	"A"	"G"
[5,]	"A"	"A"	"T"	"C"	"T"	"A"	"G"	"A"	"C"	"A"	"T"	"A"	"G"
[6,]	"A"	"A"	"T"	"C"	"T"	"A"	"G"	"A"	"C"	"A"	"T"	"A"	"G"
	[,4102]	[,4103]	[,4104]	[,4105]	[,4106]	[,4107]	[,4108]	[,4109]	[,4110]	[,4111]	[,4112]	[,4113]	[,4114]
[1,]	"A"	"T"	"C"	"C"	"T"	"C"	"T"	"G"	"A"	"T"	"A"	"T"	"A"
[2,]	"G"	"T"	"C"	"C"	"T"	"C"	"T"	"G"	"A"	"T"	"A"	"T"	"A"
[3,]	"A"	"T"	"C"	"C"	"T"	"C"	"T"	"G"	"A"	"T"	"A"	"T"	"A"
[4,]	"A"	"T"	"C"	"C"	"T"	"C"	"T"	"G"	"A"	"T"	"A"	"T"	"A"
[5,]	"A"	"T"	"C"	"C"	"T"	"C"	"T"	"G"	"A"	"T"	"A"	"T"	"A"
[6,]	"A"	"T"	"C"	"C"	"T"	"C"	"T"	"G"	"A"	"T"	"A"	"T"	"A"

	[,4115]	[,4116]	[,4117]	[,4118]	[,4119]	[,4120]	[,4121]	[,4122]	[,4123]	[,4124]	[,4125]	[,4126]	[,4127]
[1,]	"C"	"A"	"A"	"T"	"T"	"A"	"G"	"A"	"G"	"A"	"T"	"A"	"T"
[2,]	"C"	"A"	"A"	"T"	"T"	"A"	"G"	"A"	"G"	"A"	"T"	"A"	"T"
[3,]	"C"	"A"	"A"	"T"	"T"	"A"	"G"	"A"	"G"	"A"	"T"	"A"	"T"
[4,]	"C"	"A"	"A"	"T"	"T"	"A"	"G"	"A"	"G"	"A"	"T"	"A"	"T"
[5,]	"C"	"A"	"A"	"T"	"T"	"A"	"G"	"A"	"G"	"A"	"T"	"A"	"T"
[6,]	"C"	"A"	"A"	"T"	"T"	"A"	"G"	"A"	"G"	"A"	"T"	"A"	"T"
	[,4128]	[,4129]	[,4130]	[,4131]	[,4132]	[,4133]	[,4134]	[,4135]	[,4136]	[,4137]	[,4138]	[,4139]	[,4140]
[1,]	"T"	"T"	"T"	"T"	"A"	"T"	"A"	"T"	"A"	"G"	"A"	"C"	"C"
[2,]	"T"	"T"	"T"	"T"	"A"	"T"	"A"	"T"	"A"	"G"	"A"	"C"	"C"
[3,]	"T"	"T"	"T"	"T"	"A"	"T"	"A"	"T"	"A"	"G"	"A"	"C"	"C"
[4,]	"T"	"T"	"T"	"T"	"G"	"T"	"A"	"T"	"A"	"G"	"A"	"C"	"C"
[5,]	"T"	"T"	"T"	"T"	"A"	"T"	"A"	"T"	"A"	"G"	"A"	"C"	"C"
[6,]	"T"	"T"	"T"	"T"	"A"	"T"	"A"	"T"	"A"	"G"	"A"	"C"	"C"
	[,4141]	[,4142]	[,4143]	[,4144]	[,4145]	[,4146]	[,4147]	[,4148]	[,4149]	[,4150]	[,4151]	[,4152]	[,4153]
[1,]	"C"	"C"	"A"	"A"	"G"	"C"	"A"	"T"	"T"	"C"	"T"	"G"	"T"
[2,]	"C"	"C"	"A"	"A"	"G"	"C"	"A"	"T"	"T"	"C"	"T"	"G"	"T"
[3,]	"C"	"C"	"A"	"A"	"G"	"C"	"A"	"T"	"T"	"C"	"T"	"G"	"T"
[4,]	"C"	"C"	"A"	"A"	"G"	"C"	"A"	"T"	"T"	"C"	"T"	"G"	"T"
[5,]	"C"	"C"	"A"	"A"	"G"	"C"	"A"	"T"	"T"	"C"	"T"	"G"	"T"
[6,]	"C"	"C"	"A"	"A"	"G"	"C"	"A"	"T"	"T"	"C"	"T"	"G"	"T"
	[,4154]	[,4155]	[,4156]	[,4157]	[,4158]	[,4159]	[,4160]	[,4161]	[,4162]	[,4163]	[,4164]	[,4165]	[,4166]
[1,]	"G"	"C"	"A"	"T"	"A"	"A"	"A"	"A"	"G"	"T"	"T"	"A"	"A"
[2,]	"G"	"T"	"A"	"T"	"A"	"A"	"A"	"A"	"G"	"T"	"T"	"A"	"A"
[3,]	"G"	"T"	"A"	"T"	"A"	"A"	"A"	"A"	"G"	"T"	"T"	"A"	"A"
[4,]	"G"	"T"	"A"	"T"	"A"	"A"	"A"	"A"	"G"	"T"	"T"	"A"	"A"
[5,]	"G"	"T"	"A"	"T"	"A"	"A"	"A"	"A"	"G"	"T"	"T"	"A"	"A"
[6,]	"G"	"T"	"A"	"T"	"A"	"A"	"A"	"A"	"G"	"T"	"T"	"A"	"A"
	[,4167]	[,4168]	[,4169]	[,4170]	[,4171]	[,4172]	[,4173]	[,4174]	[,4175]	[,4176]	[,4177]	[,4178]	[,4179]
[1,]	"C"	"A"	"T"	"T"	"A"	"G"	"G"	"C"	"T"	"G"	"T"	"G"	"G"
[2,]	"C"	"A"	"T"	"T"	"A"	"G"	"G"	"C"	"T"	"G"	"T"	"G"	"G"
[3,]	"C"	"A"	"T"	"T"	"A"	"G"	"G"	"C"	"C"	"G"	"T"	"G"	"G"
[4,]	"C"	"A"	"T"	"T"	"A"	"G"	"G"	"C"	"T"	"G"	"T"	"G"	"G"
[5,]	"C"	"A"	"T"	"T"	"A"	"G"	"G"	"C"	"T"	"G"	"T"	"G"	"G"
[6,]	"C"	"A"	"T"	"T"	"A"	"G"	"G"	"C"	"C"	"G"	"T"	"G"	"G"
	[,4180]	[,4181]	[,4182]	[,4183]	[,4184]	[,4185]	[,4186]	[,4187]	[,4188]	[,4189]	[,4190]	[,4191]	[,4192]
[1,]	"T"	"G"	"C"	"A"	"G"	"T"	"A"	"A"	"C"	"C"	"A"	"T"	"T"
[2,]	"T"	"G"	"C"	"A"	"G"	"T"	"A"	"A"	"C"	"C"	"A"	"T"	"T"
[3,]	"T"	"G"	"C"	"A"	"G"	"T"	"A"	"A"	"C"	"C"	"A"	"T"	"T"
[4,]	"T"	"G"	"C"	"A"	"G"	"T"	"A"	"A"	"C"	"C"	"A"	"T"	"T"
[5,]	"T"	"G"	"C"	"A"	"G"	"T"	"A"	"A"	"C"	"C"	"A"	"T"	"T"
[6,]	"T"	"G"	"C"	"A"	"G"	"T"	"A"	"A"	"C"	"C"	"A"	"T"	"T"
	[,4193]	[,4194]	[,4195]	[,4196]	[,4197]	[,4198]	[,4199]	[,4200]	[,4201]	[,4202]	[,4203]	[,4204]	[,4205]
[1,]	"T"	"A"	"A"	"T"	"G"	"T"	"C"	"G"	"A"	"G"	"G"	"C"	"T"
[2,]	"T"	"A"	"A"	"T"	"G"	"T"	"C"	"G"	"A"	"G"	"G"	"C"	"T"
[3,]	"T"	"A"	"A"	"T"	"G"	"T"	"C"	"G"	"A"	"G"	"G"	"C"	"T"
[4,]	"T"	"A"	"A"	"T"	"G"	"T"	"C"	"G"	"T"	"G"	"G"	"C"	"T"
[5,]	"T"	"A"	"A"	"T"	"G"	"T"	"C"	"G"	"A"	"A"	"G"	"C"	"T"
[6,]	"T"	"A"	"A"	"T"	"G"	"T"	"C"	"G"	"A"	"A"	"G"	"C"	"T"
	[,4206]	[,4207]	[,4208]	[,4209]	[,4210]	[,4211]	[,4212]	[,4213]	[,4214]	[,4215]	[,4216]	[,4217]	[,4218]
[1,]	"C"	"T"	"A"	"T"	"T"	"T"	"C"	"G"	"G"	"A"	"A"	"A"	"T"
[2,]	"C"	"T"	"A"	"T"	"T"	"T"	"C"	"G"	"G"	"A"	"A"	"A"	"T"
[3,]	"C"	"T"	"A"	"T"	"T"	"T"	"C"	"G"	"G"	"A"	"A"	"A"	"T"
[4,]	"C"	"T"	"A"	"T"	"T"	"T"	"G"	"G"	"G"	"A"	"A"	"A"	"T"
[5,]	"C"	"T"	"A"	"T"	"T"	"T"	"G"	"G"	"G"	"A"	"A"	"A"	"T"
[6,]	"C"	"T"	"A"	"T"	"T"	"T"	"G"	"G"	"G"	"A"	"A"	"A"	"T"
	[,4219]	[,4220]	[,4221]	[,4222]	[,4223]	[,4224]	[,4225]	[,4226]	[,4227]	[,4228]	[,4229]	[,4230]	[,4231]
[1,]	"A"	"C"	"A"	"C"	"T"	"A"	"C"	"A"	"A"	"A"	"T"	"G"	"T"
[2,]	"A"	"C"	"A"	"C"	"T"	"A"	"C"	"A"	"A"	"A"	"T"	"G"	"T"
[3,]	"A"	"C"	"A"	"C"	"T"	"A"	"C"	"A"	"A"	"A"	"T"	"G"	"T"
[4,]	"A"	"C"	"A"	"C"	"T"	"A"	"C"	"A"	"A"	"A"	"T"	"G"	"T"
[5,]	"A"	"C"	"A"	"C"	"T"	"A"	"C"	"A"	"A"	"A"	"T"	"G"	"T"
[6,]	"A"	"C"	"A"	"C"	"T"	"A"	"C"	"A"	"A"	"A"	"T"	"G"	"T"
	[,4232]	[,4233]	[,4234]	[,4235]	[,4236]	[,4237]	[,4238]	[,4239]	[,4240]	[,4241]	[,4242]	[,4243]	[,4244]
[1,]	"T"	"A"	"A"	"A"	"G"	"T"	"A"	"C"	"G"	"T"	"G"	"A"	"C"
[2,]	"T"	"A"	"A"	"A"	"G"	"T"	"A"	"C"	"G"	"T"	"G"	"G"	"C"
[3,]	"T"	"A"	"A"	"A"	"G"	"T"	"A"	"C"	"G"	"T"	"G"	"G"	"C"
[4,]	"T"	"A"	"A"	"A"	"G"	"T"	"A"	"C"	"G"	"T"	"G"	"G"	"C"
[5,]	"T"	"A"	"A"	"A"	"G"	"T"	"A"	"C"	"G"	"T"	"G"	"G"	"C"
[6,]	"T"	"A"	"A"	"A"	"G"	"T"	"A"	"C"	"G"	"T"	"G"	"G"	"C"
	[,4245]	[,4246]	[,4247]	[,4248]	[,4249]	[,4250]	[,4251]	[,4252]	[,4253]	[,4254]	[,4255]	[,4256]	[,4257]
[1,]	"T"	"G"	"T"	"C"	"T"	"C"	"T"	"T"	"A"	"A"	"G"	"A"	"A"
[2,]	"T"	"G"	"T"	"C"	"C"	"T"	"C"	"T"	"T"	"A"	"A"	"G"	"A"
[3,]	"T"	"G"	"T"	"C"	"C"	"T"	"C"	"T"	"T"	"A"	"A"	"G"	"A"
[4,]	"T"	"G"	"T"	"C"	"A"	"T"	"C"	"T"	"T"	"A"	"A"	"G"	"A"
[5,]	"T"	"G"	"T"	"C"	"A"	"T"	"C"	"T"	"T"	"A"	"A"	"G"	"A"

[6,]	"T"	"G"	"T"	"C"	"C"	"T"	"C"	"T"	"T"	"A"	"A"	"G"	"A"
	[,4258]	[,4259]	[,4260]	[,4261]	[,4262]	[,4263]	[,4264]	[,4265]	[,4266]	[,4267]	[,4268]	[,4269]	[,4270]
[1,]	"C"	"A"	"C"	"T"	"A"	"G"	"T"	"A"	"G"	"A"	"G"	"C"	"A"
[2,]	"C"	"A"	"C"	"T"	"A"	"G"	"T"	"A"	"G"	"A"	"G"	"C"	"A"
[3,]	"C"	"A"	"C"	"T"	"A"	"G"	"T"	"A"	"G"	"A"	"G"	"C"	"A"
[4,]	"C"	"A"	"C"	"T"	"A"	"G"	"T"	"A"	"G"	"A"	"G"	"C"	"A"
[5,]	"C"	"A"	"C"	"T"	"A"	"G"	"T"	"A"	"G"	"A"	"G"	"C"	"A"
[6,]	"C"	"A"	"C"	"T"	"A"	"G"	"T"	"A"	"G"	"A"	"G"	"C"	"A"
	[,4271]	[,4272]	[,4273]	[,4274]	[,4275]	[,4276]	[,4277]	[,4278]	[,4279]	[,4280]	[,4281]	[,4282]	[,4283]
[1,]	"A"	"A"	"G"	"A"	"C"	"T"	"T"	"A"	"A"	"T"	"C"	"A"	"T"
[2,]	"A"	"A"	"G"	"A"	"C"	"T"	"T"	"A"	"A"	"T"	"C"	"A"	"T"
[3,]	"A"	"A"	"G"	"A"	"C"	"T"	"T"	"A"	"A"	"T"	"C"	"A"	"T"
[4,]	"A"	"A"	"G"	"A"	"C"	"T"	"T"	"A"	"A"	"T"	"C"	"A"	"T"
[5,]	"A"	"A"	"G"	"A"	"C"	"T"	"T"	"A"	"A"	"T"	"C"	"A"	"T"
[6,]	"A"	"A"	"G"	"A"	"C"	"T"	"T"	"A"	"A"	"T"	"C"	"A"	"T"
	[,4284]	[,4285]	[,4286]	[,4287]	[,4288]	[,4289]	[,4290]	[,4291]	[,4292]	[,4293]	[,4294]	[,4295]	[,4296]
[1,]	"A"	"T"	"C"	"A"	"A"	"C"	"T"	"T"	"A"	"A"	"T"	"T"	"C"
[2,]	"A"	"T"	"C"	"A"	"A"	"C"	"T"	"T"	"A"	"A"	"T"	"T"	"C"
[3,]	"A"	"T"	"C"	"A"	"A"	"C"	"T"	"T"	"A"	"A"	"T"	"T"	"C"
[4,]	"A"	"T"	"C"	"A"	"A"	"C"	"T"	"T"	"A"	"A"	"T"	"T"	"C"
[5,]	"A"	"T"	"C"	"A"	"A"	"C"	"T"	"T"	"A"	"A"	"T"	"T"	"C"
[6,]	"A"	"T"	"C"	"A"	"A"	"C"	"T"	"T"	"A"	"A"	"T"	"T"	"C"
	[,4297]	[,4298]	[,4299]	[,4300]	[,4301]	[,4302]	[,4303]	[,4304]	[,4305]	[,4306]	[,4307]	[,4308]	[,4309]
[1,]	"T"	"G"	"T"	"T"	"A"	"C"	"A"	"C"	"A"	"A"	"T"	"A"	"T"
[2,]	"T"	"G"	"T"	"T"	"A"	"C"	"A"	"C"	"A"	"A"	"T"	"A"	"T"
[3,]	"T"	"G"	"T"	"T"	"A"	"C"	"A"	"C"	"A"	"A"	"T"	"A"	"T"
[4,]	"T"	"G"	"T"	"T"	"A"	"C"	"A"	"C"	"A"	"A"	"T"	"G"	"T"
[5,]	"T"	"G"	"T"	"T"	"A"	"C"	"A"	"C"	"A"	"A"	"T"	"G"	"T"
[6,]	"T"	"G"	"T"	"T"	"A"	"C"	"A"	"C"	"A"	"A"	"T"	"A"	"T"
	[,4310]	[,4311]	[,4312]	[,4313]	[,4314]	[,4315]	[,4316]	[,4317]	[,4318]	[,4319]	[,4320]	[,4321]	[,4322]
[1,]	"G"	"T"	"G"	"T"	"T"	"T"	"T"	"T"	"T"	"A"	"A"	"T"	"A"
[2,]	"G"	"T"	"G"	"T"	"T"	"T"	"T"	"T"	"T"	"A"	"A"	"T"	"A"
[3,]	"G"	"T"	"G"	"T"	"T"	"T"	"T"	"T"	"T"	"A"	"A"	"T"	"A"
[4,]	"G"	"T"	"G"	"T"	"T"	"T"	"T"	"T"	"T"	"A"	"A"	"T"	"A"
[5,]	"A"	"T"	"G"	"T"	"T"	"T"	"T"	"T"	"T"	"A"	"A"	"T"	"A"
[6,]	"G"	"T"	"G"	"T"	"T"	"T"	"T"	"T"	"T"	"A"	"A"	"T"	"A"
	[,4323]	[,4324]	[,4325]	[,4326]	[,4327]	[,4328]	[,4329]	[,4330]	[,4331]	[,4332]	[,4333]	[,4334]	[,4335]
[1,]	"T"	"A"	"C"	"T"	"A"	"A"	"C"	"C"	"A"	"T"	"T"	"T"	"C"
[2,]	"T"	"A"	"C"	"T"	"A"	"A"	"C"	"C"	"A"	"T"	"T"	"T"	"C"
[3,]	"T"	"A"	"C"	"T"	"A"	"A"	"C"	"C"	"A"	"T"	"T"	"T"	"C"
[4,]	"T"	"A"	"C"	"T"	"A"	"A"	"C"	"C"	"A"	"T"	"T"	"T"	"C"
[5,]	"T"	"A"	"C"	"T"	"A"	"A"	"C"	"C"	"A"	"T"	"T"	"T"	"C"
[6,]	"T"	"A"	"C"	"T"	"A"	"A"	"C"	"C"	"A"	"T"	"T"	"T"	"C"
	[,4336]	[,4337]	[,4338]	[,4339]	[,4340]	[,4341]	[,4342]	[,4343]	[,4344]	[,4345]	[,4346]	[,4347]	[,4348]
[1,]	"T"	"T"	"A"	"T"	"G"	"G"	"A"	"A"	"A"	"G"	"G"	"T"	"C"
[2,]	"T"	"T"	"A"	"T"	"G"	"G"	"A"	"A"	"A"	"G"	"G"	"T"	"C"
[3,]	"T"	"T"	"A"	"T"	"G"	"G"	"A"	"A"	"A"	"G"	"G"	"T"	"C"
[4,]	"T"	"T"	"A"	"T"	"G"	"G"	"A"	"A"	"A"	"G"	"G"	"T"	"C"
[5,]	"T"	"T"	"A"	"T"	"G"	"G"	"A"	"A"	"A"	"G"	"G"	"T"	"C"
[6,]	"T"	"T"	"A"	"T"	"G"	"G"	"A"	"A"	"A"	"G"	"G"	"T"	"C"
	[,4349]	[,4350]	[,4351]	[,4352]	[,4353]	[,4354]	[,4355]	[,4356]	[,4357]	[,4358]	[,4359]	[,4360]	[,4361]
[1,]	"C"	"T"	"G"	"T"	"G"	"G"	"G"	"G"	"A"	"G"	"C"	"C"	"C"
[2,]	"C"	"T"	"G"	"T"	"G"	"G"	"G"	"G"	"A"	"G"	"C"	"C"	"C"
[3,]	"C"	"T"	"G"	"T"	"G"	"G"	"G"	"G"	"A"	"G"	"C"	"C"	"C"
[4,]	"C"	"T"	"G"	"T"	"G"	"G"	"G"	"G"	"A"	"G"	"C"	"C"	"C"
[5,]	"C"	"T"	"G"	"T"	"G"	"G"	"G"	"G"	"A"	"G"	"C"	"C"	"C"
[6,]	"C"	"T"	"G"	"T"	"G"	"G"	"G"	"G"	"A"	"G"	"C"	"C"	"C"
	[,4362]	[,4363]	[,4364]	[,4365]	[,4366]	[,4367]	[,4368]	[,4369]	[,4370]	[,4371]	[,4372]	[,4373]	[,4374]
[1,]	"A"	"T"	"C"	"C"	"T"	"C"	"T"	"C"	"G"	"C"	"C"	"A"	"A"
[2,]	"A"	"T"	"C"	"C"	"T"	"C"	"T"	"C"	"G"	"C"	"C"	"A"	"A"
[3,]	"A"	"T"	"C"	"C"	"T"	"C"	"T"	"C"	"G"	"C"	"C"	"A"	"A"
[4,]	"A"	"T"	"C"	"C"	"T"	"C"	"T"	"C"	"G"	"C"	"C"	"A"	"A"
[5,]	"A"	"T"	"C"	"C"	"T"	"C"	"T"	"C"	"G"	"C"	"C"	"A"	"A"
[6,]	"A"	"T"	"C"	"C"	"T"	"C"	"T"	"C"	"G"	"C"	"C"	"A"	"A"
	[,4375]	[,4376]	[,4377]	[,4378]	[,4379]	[,4380]	[,4381]	[,4382]	[,4383]	[,4384]	[,4385]	[,4386]	[,4387]
[1,]	"G"	"C"	"C"	"A"	"T"	"C"	"A"	"C"	"A"	"G"	"G"	"C"	"T"
[2,]	"G"	"C"	"C"	"A"	"T"	"C"	"A"	"C"	"A"	"G"	"G"	"C"	"T"
[3,]	"G"	"C"	"C"	"A"	"T"	"C"	"A"	"C"	"A"	"G"	"G"	"C"	"T"
[4,]	"G"	"C"	"C"	"A"	"T"	"C"	"A"	"C"	"A"	"G"	"G"	"C"	"T"
[5,]	"G"	"C"	"C"	"A"	"T"	"C"	"A"	"C"	"A"	"G"	"G"	"C"	"T"
[6,]	"G"	"C"	"C"	"A"	"T"	"C"	"A"	"C"	"A"	"G"	"G"	"C"	"T"
	[,4388]	[,4389]	[,4390]	[,4391]	[,4392]	[,4393]	[,4394]	[,4395]	[,4396]	[,4397]	[,4398]	[,4399]	[,4400]
[1,]	"C"	"T"	"G"	"C"	"A"	"T"	"A"	"C"	"A"	"C"	"A"	"T"	"G"
[2,]	"C"	"T"	"G"	"C"	"A"	"T"	"A"	"C"	"A"	"C"	"A"	"T"	"G"
[3,]	"C"	"T"	"G"	"C"	"A"	"T"	"A"	"C"	"A"	"C"	"A"	"T"	"G"
[4,]	"C"	"T"	"G"	"C"	"A"	"T"	"A"	"C"	"A"	"C"	"A"	"T"	"G"

```

[5,] "C" "T" "G" "C" "A" "T" "A" "T" "A" "C" "A" "T" "G"
[6,] "C" "T" "G" "C" "A" "T" "A" "C" "A" "C" "A" "T" "G"
      [,4401] [,4402] [,4403] [,4404] [,4405] [,4406] [,4407] [,4408] [,4409] [,4410] [,4411] [,4412] [,4413]
[1,] "C" "A" "C" "T" "C" "A" "G" "T" "G" "T" "G" "G" "A"
[2,] "T" "A" "C" "T" "C" "A" "G" "T" "G" "T" "G" "G" "A"
[3,] "C" "A" "C" "T" "C" "A" "G" "T" "G" "T" "G" "G" "A"
[4,] "C" "A" "C" "T" "C" "A" "G" "T" "G" "T" "G" "G" "A"
[5,] "C" "A" "C" "T" "C" "A" "G" "T" "G" "T" "G" "G" "A"
[6,] "C" "A" "C" "T" "C" "A" "G" "T" "G" "T" "G" "G" "A"
      [,4414] [,4415] [,4416] [,4417] [,4418] [,4419] [,4420] [,4421] [,4422] [,4423] [,4424] [,4425] [,4426]
[1,] "C" "T" "G" "G" "G" "A" "A" "G" "C" "A" "T" "T" "A"
[2,] "C" "T" "G" "G" "G" "A" "A" "G" "C" "A" "T" "T" "A"
[3,] "C" "T" "G" "G" "G" "A" "A" "G" "C" "A" "T" "T" "A"
[4,] "C" "T" "G" "G" "G" "A" "A" "G" "C" "A" "T" "T" "A"
[5,] "C" "T" "G" "G" "G" "A" "A" "G" "C" "A" "T" "T" "A"
[6,] "C" "T" "G" "G" "G" "A" "A" "G" "C" "A" "T" "T" "A"
      [,4427] [,4428] [,4429] [,4430] [,4431] [,4432] [,4433] [,4434] [,4435] [,4436] [,4437] [,4438] [,4439]
[1,] "C" "T" "T" "T" "G" "T" "A" "G" "A" "T" "G" "T" "A"
[2,] "C" "T" "T" "T" "G" "T" "A" "G" "A" "T" "G" "T" "A"
[3,] "C" "T" "T" "T" "G" "T" "A" "G" "A" "T" "G" "T" "A"
[4,] "C" "T" "T" "T" "G" "T" "A" "G" "A" "T" "G" "T" "A"
[5,] "C" "T" "T" "T" "G" "T" "A" "G" "A" "T" "G" "T" "A"
[6,] "C" "T" "T" "T" "G" "T" "A" "G" "A" "T" "G" "T" "A"
      [,4440] [,4441] [,4442] [,4443] [,4444] [,4445] [,4446] [,4447] [,4448] [,4449] [,4450] [,4451] [,4452]
[1,] "T" "T" "T" "T" "C" "A" "A" "T" "A" "A" "A" "G" "A"
[2,] "T" "T" "T" "T" "C" "A" "A" "T" "A" "A" "A" "G" "A"
[3,] "T" "T" "T" "T" "C" "A" "A" "T" "A" "A" "A" "G" "A"
[4,] "T" "T" "T" "T" "C" "A" "A" "T" "A" "A" "A" "G" "A"
[5,] "T" "T" "T" "T" "C" "A" "A" "T" "A" "A" "A" "G" "A"
[6,] "T" "T" "T" "T" "C" "A" "A" "T" "A" "A" "A" "G" "A"
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[1,] "A" "A" "A" "A" "A" "A" "T" "A" "G" "T" "T" "T" "T"
[2,] "A" "A" "A" "A" "A" "A" "T" "A" "G" "T" "T" "T" "T"
[3,] "A" "A" "A" "A" "T" "T" "A" "G" "T" "T" "T" "T" "A"
[4,] "A" "A" "A" "A" "A" "G" "A" "T" "A" "G" "T" "T" "T"
[5,] "A" "A" "A" "A" "A" "A" "T" "A" "G" "T" "T" "T" "T"
[6,] "A" "A" "A" "A" "A" "T" "T" "A" "G" "T" "T" "T" "T"
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[1,] "A" "C" "A" "T" "T" "A" "A" "A"
[2,] "A" "C" "A" "T" "T" "A" "A" "A"
[3,] "C" "A" "T" "T" "A" "A" "A"
[4,] "T" "A" "C" "A" "T" "A" "A"
[5,] "A" "A" "A" "A" "A" "A" "A"
[6,] "A" "C" "A" "T" "T" "A" "A" "A"

```

```

> # Compute the SFS
> SFS <- compute_SFS(alignment)
>
> # Output the SFS
> print(SFS)
[1] 290 32 298 260 3602
>
> # The function for computing TajimasD values
> TajimasD <- function(sfs){
+   #For the computed SFS
+   n <- length(sfs) + 1
+   ss <- sum(sfs)
+
+   a1 <- sum(1 / seq_len(n-1))
+   a2 <- sum(1 / seq_len(n-1)^2)
+
+   b1 <- (n + 1) / (3 * (n - 1))
+   b2 <- 2 * (n^2 + n + 3)/(9 * n * (n - 1))
+
+   c1 <- b1 - 1/a1
+   c2 <- b2 - (n + 2)/(a1 * n) + a2 / a1^2
+
+   e1 <- c1 / a1
+   e2 <- c2 / (a1^2 + a2)
+
+   Vd <- e1 * ss + e2 * ss * (ss - 1)
+
+   theta_pi <- sum(2 * seq_len(n-1) * (n - seq_len(n-1)) * sfs)/(n*(n-1))
+   theta_w <- ss / a1
+   res <- (theta_pi - theta_w) / sqrt(Vd)
+   return(res)
+ }

```



```
>
> #Compute TajimaD
> TajimasD(SFS)
[1] -1.099526
>
>
>
```