The nucleotide sequence of the 5S rRNA from *Vibrio nereis* ATCC 25917M.T. MacDonell^{1,2*} and R.R. Colwell²

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The ribonucleotide sequence of the 5S ribosomal RNA purified from the marine eubacterial species, *Vibrio nereis* ATCC 25917, has been determined. The 5S rRNA was purified by HPLC (1), end-labeled, and the sequence determined enzymatically (2,3). The sequence is shown in the "chair" secondary structure model described by Erdmann et al. (4), which best accommodates base-pairings consistent with previously reported data (5).

In this figure, boxes indicate bases participating in helix formation and circles indicate unpaired bases. Helices are designated by numbers, loops by letters. Evolutionary trees constructed from this and other Gram negative eubacterial 5S rRNA sequences indicate that *V. nereis* is a member of the gamma-3 division of the Rhodobacteria and is specifically related to the group of bacteria which comprise the genus *Vibrio sensu strictu*. This sequence differs from most other gamma-3 sequences in that it contains an extra base, i.e., 14 bases, in loop c. This feature is shared with two other marine *Vibrio* species, *V. alginolyticus* and *V. natriegens*.

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