

The nucleotide sequence of the 5S ribosomal RNA of *Actinia equina* and *Sepia officinalis*

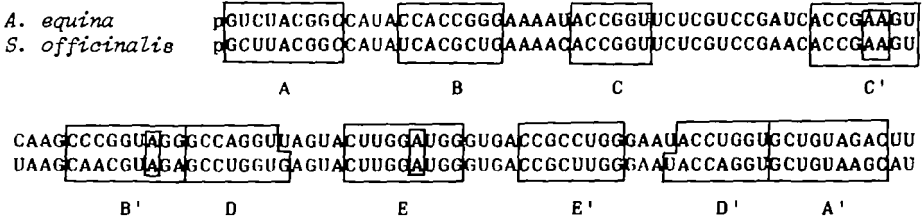
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Submitted February 20, 1987

Accession no. Y00101

5S rRNA was prepared (1) from whole tissue of the sea anemone *Actinia equina* (phylum Cnidaria, class Anthozoa) and from the liver and from muscle tissue of the squid *Sepia officinalis* (phylum Mollusca, class Cephalopoda). The 5S RNAs were labeled at the 3'-terminus by ligation of [5'-³²P]pCp and the sequences were derived mainly by partial chemical degradation (2). Where necessary, the sequences were confirmed by partial nuclease degradation (3) and the 5'-end group identified by HPLC of unlabeled RNA (4). In the case of the squid, identical structures were found for liver and muscle 5S RNA. The following sequences were derived.



Boxes on the alignment enclose double-stranded areas according to a previously documented (5) secondary structure model.

A study of evolutionary relationships among 74 metazoan species, based on 5S RNA sequences including those reported here, is presented elsewhere (6).

We thank Dr. W. Declair for a gift of *S. officinalis* tissue.

References

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