



Marine Anti-HIV Drugs

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Abstract: Strong therapeutic medicines have been developed with significant help from nature. In truth, terrestrially derived medications have generally dominated when examining the development of medicine in relation to the evolution of people. The marine environment, which makes up 95% of the biosphere, covers more than 70% of the earth's surface. Seas and oceans are home to a diverse range of marine plants, animals, and organisms, as well as secondary metabolites.^[1] HIV-1 reverse transcriptase is a potential therapeutic target for the treatment of those living with HIV/AIDS or those who have previously displayed symptoms of the disease. It is critical to develop novel inhibitors for this enzyme since the amount of viral resistance to existing treatments is rising. Prior to 2004, no marine drug had received FDA approval; nevertheless, after that year, efforts to produce marine pharmaceuticals started.^[2]

Keywords: Reverse transcriptase, anti-retrovirals, marine biosphere, marine environment, and drug development

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