

Anticancer polysaccharide in Marine Algae

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ABSTRACT

Marine floras such as bacteria, actinobacteria, cyanobacteria, fungi, microalgae, seaweeds, mangroves and other halophytes are taxonomically diverse, largely productive, biologically active, and chemically unique offering a great scope for discovery of new anticancer drugs. The marine floras are rich chemicals predominantly belonging to *polyphenols* and *sulphated polysaccharides*. The chemicals have displayed an array of pharmacological properties especially antioxidant, immunostimulatory, and antitumour activities. These phytochemicals activate macrophages, induce *apoptosis*, and prevent oxidative damage of DNA, thereby controlling *carcinogenesis*. Nowadays, algae have been imparted as a constituent of dietary supplements due to their *antimutagenic*, *anticoagulant* and *antitumor* properties. The current study is focused on various antitumoral polysaccharides like *Fuoidan*, *Laminarans*, *Alginic acid* obtained from Brown algae, *Carrageans* from Red algae and *Ulvans* obtained from green algae.