

MARINE FUNGI - NATURAL PRODUCTS FROM MARINE FUNGI FOR THE TREATMENT OF CANCER

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The aim of the FP7 funded project MARINE FUNGI is the demonstration of sustainable exploitation of marine natural resources providing appropriate culture conditions for the underutilised group of marine fungi, thus enabling efficient production of marine natural products in the laboratory and also in large scale cultures, avoiding harm to the natural environment.

The focus of MARINE FUNGI are new anti-cancer compounds. The project carries out the characterisation of these compounds to the stage of *in vivo* proof of concept ready to enter further drug development in order to valorise the results of the project. MARINE FUNGI covers two approaches to gain effective producer strains: a) Candidate strains originating from one partner's strain collection are characterised and optimised using molecular methods; b) New fungi are isolated from unique habitats, i.e. tropical coral reefs, endemic macroalgae and sponges from the Mediterranean. Culture conditions for these new isolates are optimised for the production of new anti-cancer metabolites. MARINE FUNGI will develop a process concept for these compounds providing the technological basis for a sustainable use of marine microbial products as a result of 'Blue Biotech'. The project explores the potential of marine fungi as excellent sources for useful new natural compounds. This is accomplished by the formation of a new strongly interacting research network comprising the scientific and technological actors, including 3 SMEs and 2 ICPC partners, necessary to move along the added-value chain from the marine habitat to the drug candidate and process concept. The generated and existing knowledge will be disseminated widely for the valorisation of the project results.

References

www.marinefungi.eu