# MISCOSPORIN TYPE AMINO ACID (CHINORINE) AS ANTIOXIDANT OR ADDITIVE IN FOOD PRODUCTS

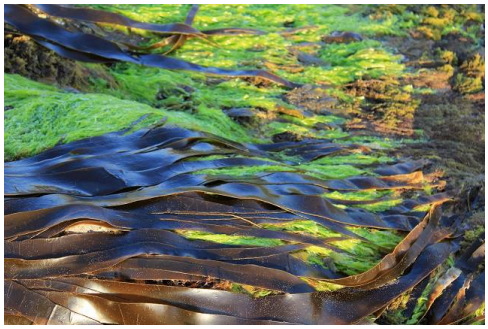
## Description:

Ultraviolet radiation is one of the biological factors that limit the survival, physiology, and growth of many organisms. Some of the many harmful effects of UV radiation include the alteration of DNA and protein molecules, or the formation of free radicals. Free radicals cause significant alterations in molecules such as DNA, lipids and proteins, seriously altering the cell cycle and functionality. Free radicals are associated with a wide range of pathologies and diseases such as Alzheimer's or Parkinson's, and conditions related to sun exposure such as cataracts, photoaging, inflammatory episodes and neoplasms. There are currently more than 10 mycosporins described in fungi and more than 20 mycosporin-like amino acids from marine organisms and algae. All of them are small molecules that have a high photostability. Among the different properties attributed to them, its activity as a photoprotector and as an antioxidant stands out. The present invention describes the potentiality of the amino acid type mycosporin chinorine isolated from Gymnogongrus devoniensis, as a free radical scavenger and inhibitor of lipid peroxidation.

**Keywords:**
Amino Acids, Algae, Mycosporins, Antioxidant, Nutraceutical Preparations

**Sectors:**
Biotechnology, Health, Chemistry

**Areas:**
Health Sciences, Food, Therapeutics, Biotechnology, Synthesis and procedures



## Advantages:

Chinorine isolated from Gymnogongrus devoniensis has antioxidant properties comparable to other commercial compounds with the advantage of being of natural origin.

## Uses and Applications:

Chinorine isolated from Gymnogongrus devoniensis, acting as an antioxidant, could be used in pharmaceutical preparations or formulations for the prevention and therapeutic treatment of diseases or conditions related to free radicals, such as Parkinson's or Alzheimer's, as ingredients in products of parapharmacy, in functional foods, in nutritional supplements and nutraceutical preparations, and in the food industry as a potentially antioxidant additive.

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