

## Activity of Glycyrrhiza glabra against COVID 19 through deactivation of COVID-19 main protease (6M03)

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**Abstract:** An in-silico study was performed to determine the activity of Glycyrrhiza glabra against COVID 19. Molecular docking using Biovia Discovery Studio was performed to identify the phytochemical responsible to deactivate COVID-19 main protease (6M03) enzyme. It was found that Allin and Sulforaphane helped to prevent COVID 19.

**Introduction:** Glycyrrhiza glabra is known for its medicinal activities. Traditionally used to treat many diseases, such as respiratory disorders, hyperdipsia, epilepsy, fever, sexual debility, paralysis, stomach ulcers, rheumatism, skin diseases, hemorrhagic diseases, and jaundice.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Magnoliopsida
Order	Fabales
Family	Fabaceae
Genus	Glycyrrhiza
Species	glabra

Major phytochemicals present in the plant are:

- a. Alliin
- b. Isorhamnetin
- c. Sulforaphane
- d. Ascorbic acid

One of the major enzymes required for the survival of the organism causing COVID 19 is COVID-19 main protease (6M03) enzyme. The objective of this work is to find the phytochemical that can deactivate the enzyme, thereby preventing the physiological activity of the organism.