

## Activity of *Cedrus libani* against Herpes through deactivation of Herpes Simplex virus Type II Protease (1AT3)

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**Abstract:** An in-silico study was performed to determine the activity of *Cedrus libani* against Herpes. Molecular docking using Biovia Discovery Studio was performed to identify the phytochemical responsible to deactivate Herpes Simplex virus Type II Protease (1AT3) enzyme. It was found that Eugenol helped to prevent Herpes.

**Introduction:** *Cedrus libani* is known for its medicinal activities. It is traditionally used to treat diseases like arteriosclerosis, water retention, herpes, lymphatic damage, etc.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Pinopsida
Order	Pinales
Family	Pinaceae
Genus	<i>Cedrus</i>
Species	<i>libani</i>

Major phytochemicals present in the plant are:

- Luteolin
- Carnosic acid
- Eugenol
- Salicylic acid

One of the major enzymes required for the survival of the organism causing Herpes is Herpes Simplex virus Type II Protease (1AT3) enzyme. The objective of this work is to find the phytochemical that can deactivate the enzyme, thereby preventing the physiological activity of the organism.