

## Activity of *Atlantia* sp. against Herpes through deactivation of Thymidine Kinase of Herpes Simplex virus (1KIM)

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**Abstract:** An in-silico study was performed to determine the activity of *Atlantia* sp. against Herpes. Molecular docking using Biovia Discovery Studio was performed to identify the phytochemical responsible to deactivate Thymidine Kinase of Herpes Simplex virus (1KIM) enzyme. It was found that Ajoene helped to prevent Herpes.

**Introduction:** *Atlantia* sp. is known for its medicinal activities. The flowers, fruit and roots are used to cure herpes, jaundice, fever, headache and asthma.

The plant is classified as follows:

Kingdom	Plantae
Division	Magnoliophyta
Class	Magnoliopsida
Order	Sapindales
Family	Rutaceae
Genus	<i>Atalantia</i>
Species	<i>racemosa</i>

Major phytochemicals present in the plant are:

- Allicin
- Ajoene
- Gallic acid
- Ellagic acid

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