

Activity of Aloe vera 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 Aloe vera 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 Sitosterol helped to prevent Herpes.

Introduction: Aloe vera is known for its medicinal activities. Aloe vera used to cure herpes, weak digestion, general weakness, anaemia, bloating, stomach ulcers and gum disease.

The plant is classified as follows:

Kingdom	Plantae
Division	Magnoliophyta
Class	Liliopsida
Order	Liliales
Family	Aloeaceae
Genus	Aloe
Species	vera

Major phytochemicals present in the plant are:

- a. Phytoene
- b. Salicylic acid
- c. Sitosterol
- d. Lupeol

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.