

Activity of *Zingiber officinale* against Hepatitis C through deactivation of Hepatitis C Virus IRES Pseudoknot domain

(3T4B)

Poonam Pradhan¹, Yashaswi Nayak²

¹180705180005@cutm.ac.in

²yashaswi.nayak@cutm.ac.in

Centurion University of Technology and Management, Odisha, India

Abstract: An in-silico study was performed to determine the activity of *Zingiber officinale* against Hepatitis C. Molecular docking using Biovia Discovery Studio was performed to identify the phytochemical responsible to deactivate Hepatitis C Virus IRES Pseudoknot domain

(3T4B) enzyme. It was found that Peonidin helped to prevent Hepatitis C.

Introduction: *Zingiber officinale* is known for its medicinal activities. It is a spice consumed worldwide for culinary and medicinal purposes. The plant has a number of chemicals responsible for its medicinal properties, such as antiarthritis, antiinflammatory, antidiabetic, antibacterial, antifungal, anticancer, etc.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Magnoliopsida
Order	Zingiberales
Family	Zingiberaceae
Genus	<i>Zingiber</i>
Species	<i>officinale</i>

Major phytochemicals present in the plant are:

- Naringin
- Daidzein
- Peonidin
- Zingiberene

One of the major enzymes required for the survival of the organism causing Hepatitis C is Hepatitis C Virus IRES Pseudoknot domain