

Activity of *Agrimonia eupatoria* against Hepatitis C through deactivation of Hepatitis C Virus IRES Pseudoknot domain

(3T4B)

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Abstract: An in-silico study was performed to determine the activity of *Agrimonia eupatoria* 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 Phenyl isothiocyanate helped to prevent Hepatitis C.

Introduction: *Agrimonia eupatoria* is known for its medicinal activities. It is used as a folk remedy for asthma, bronchitis, dermatitis, entorrhagia, enuresis, gastrorrhagia, hematuria, hepatitis, metrorrhagia and neuralgia.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Magnoliopsida
Order	Rosales
Family	Rosaceae
Genus	<i>Agrimonia</i>
Species	<i>eupatoria</i>

Major phytochemicals present in the plant are:

- Resveratrol
- Phenyl isothiocyanate
- Rutin
- Ferulic acid

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

(3T4B) enzyme. The objective of this work is to find the phytochemical that can deactivate the enzyme, thereby preventing the physiological activity of the organism.