

**North American  
Herb & Spice**

The *original* makers of wild high mountain oil of oregano, Oregamax, Juice of Oregano, and other edible herbs

**Oreganol P73 and Oregacyn P73 Have a Direct Killing Effect and Ability to Stop Replication of the “Human” Coronavirus *in Vitro***

Coronaviruses are so named because the organisms exhibit a halo-like appearance when viewed under the microscope. Coronaviruses are the second leading cause of colds and influenza, the first leading cause being attributed to rhinoviruses.

The coronavirus is associated with symptoms ranging from fever, headache, chills and sneezing to sore throat, cough and nasal discharge. The coronavirus can also cause pneumonia and other respiratory symptoms. The coronavirus is linked to symptoms associated with SARS (Severe Acute Respiratory Syndrome). The organism believed to be responsible for the SARS outbreak (first discovered in November 2002) is a novel form of the coronavirus.

Recent *in Vitro* research conducted by Microbiotest, Inc. (Sterling, VA) demonstrated that Oreganol P73 and Oregacyn P73 have a potent direct killing effect against the human coronavirus, as well as having the ability to halt virus replication in host cells infected with the human coronavirus.

\* North American Herb & Spice, Waukegan, Illinois (Data on File)

<b><u>Oreganol P73 Direct Kill Effect on Coronavirus</u></b> <b>(In Vitro at 0.01% Solution)</b>		<b><u>Oregacyn P73 Direct Kill Effect on Coronavirus</u></b> <b>(In Vitro at 0.01% Solution)</b>	
Coronavirus: Exposure Time to Oreganol P73	Coronavirus Per ML	Coronavirus: Exposure Time to Oregacyn P73	Coronavirus Per ML
0 Minutes	5,500,000	0 Minutes	5,500,000
2 Minutes	10,000	2 Minutes	3330
5 Minutes	5,000	5 Minutes	167
10 Minutes	3333	10 Minutes	150
15 Minutes	167	15 Minutes	133
20 Minutes	150	20 Minutes	Non-Detectable

**Oreganol P73 and Oregacyn P73 Human Coronavirus Study (In Vitro)**

The Effect of Oreganol P73 and Oregacyn P73 on Coronavirus Replication

<u>Agent Tested</u>	<u>Coronavirus Per ML</u>
• Input Virus Control	500,000
• Oreganol P73 (0.1% Solution)	Non-Detectable
• Oregacyn P73 (0.01% Solution)	Non-Detectable

\* Virus infected host cell as control, mixed with Oreganol P73 and Oregacyn P73

Oreganol P73 had a direct killing effect on the coronavirus by reducing the viral count from 5,500,000 copies per ml to 150 copies of virus per ml, over a period of twenty minutes. Oregacyn P73 also had a direct killing effect on the coronavirus, but at a steeper rate of viral kill. Oregacyn P73 reduced the viral count from the 5,500,000 copies per ml starting point to a non-detectable level in twenty minutes. The above graph demonstrates the ability of Oreganol P73 and Oregacyn P73 to directly kill the coronavirus (In Vitro).

When virus infected host cells were mixed with Oreganol P73 and Oregacyn P73, Oreganol (0.1% solution) and Oregacyn (0.01% solution) were also able to stop the replication of the human coronavirus in infected host cells (In Vitro).

In summary, this study demonstrated the ability of Oreganol and Oregacyn P73 to directly kill the human coronavirus (In Vitro), and halt human coronavirus replication in infected host cells (In Vitro).

Note: These statements have not been approved by the FDA. This is strictly for information purposes based on extensive research and freedom of speech.