

Kaposi's sarcoma virus inhibits immune responses.

Printed from <https://www.cancerquest.org/newsroom/2011/01/kaposis-sarcoma-virus-inhibits-immune-responses> on 05/16/2026



The Kaposi's Sarcoma Virus been linked with several different types of cancer. The mechanisms that cause cancer to form after infection are still being discovered. A recently published article in the journal *Science* reveals a new piece of the puzzle. Once the Kaposi's sarcoma virus invades a cell, it hijacks cellular machinery and uses it to proliferate. In order for this process to work, however, the virus must subvert the body's innate immune response, which would cause the infected cell to commit suicide rather than allow the virus to replicate. The virus inhibits the immune response by using a molecule called KSHV Orf63, which mimics the appearance of the human molecule NLRP1. These two bind each other and effectively shut down the pro-inflammatory activity of NLRP1. Subsequently, mutated cells are not destroyed, which is a key step in cancer development.

Source

<http://www.sciencemag.org/content/331/6015/330>

Learn More

[Learn More](#)