

Which interferons best control viral infections?

26 June 2014

Respiratory and intestinal infections caused by RNA viruses stimulate infected cells to produce interferons, which can act alone or in combination to block virus replication. Important differences between the presence of IFN receptors on cells and new evidence that specific types of IFNs can control RNA virus infection are explored in a Review article in *Journal of Interferon & Cytokine Research (JICR)*.

In "[Type-I and III Interferon Production in Response to RNA Viruses](#)," Elizabeth Reid and Bryan Charleston, The Pirbright Institute (Surrey, UK), review the most recent studies looking at how RNA virus infections are able to induce multiple signaling pathways in host cells. As a result, different types of interferons are produced, each with distinct antiviral properties.

"The interferon system plays a critical role in maintaining an optimum equilibrium between virus replication and host survival," says Co-Editor-in-Chief Ganes C. Sen, PhD, Chairman, Department of Molecular Genetics, Cleveland Clinic Foundation, Ohio. "This review describes how RNA viruses achieve this balance by regulating the synthesis of Type I and Type III interferons."

More information: The article is available free on the [JICR](#) website.

Provided by Mary Ann Liebert, Inc

APA citation: Which interferons best control viral infections? (2014, June 26) retrieved 23 September 2021 from <https://medicalxpress.com/news/2014-06-interferons-viral-infections.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.