

Open Peer Review on Qeios

## Innate Defense Regulator SGX942

National Cancer Institute

## Source

National Cancer Institute. <u>Innate Defense Regulator SGX942</u>. NCI Thesaurus. Code C113437.

A synthetic, 5-amino acid peptide and Innate Defense Regulator (IDR), with immunomodulating, anti-inflammatory, anti-infective and anti-mucositis activities. Upon intravenous administration, SGX942 binds to the ZZ domain of sequestosome-1, also called p62, and activates regulatory signaling transduction pathways involved in the modulation of the innate immune system, such as those mediated by mitogen-activated protein kinase (MAPK) p38 and CCAAT-enhancer-binding protein. This agent promotes monocyte and macrophage recruitment to, and accelerates healing in damaged and infected tissue; it suppresses inflammation through the regulation of the expression of multiple cytokines. This agent may prevent or decrease chemo- or radiotherapy-induced mucositis as well as other types of infection. p62, an intracellular adaptor protein that functions downstream of certain signaling receptors, plays a key role in the activation of the innate immune system.