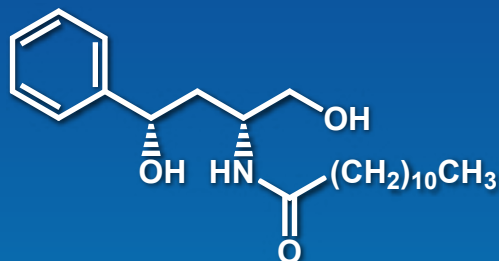


Ceramide Transport Protein (CERT) Inhibitor HPA-12

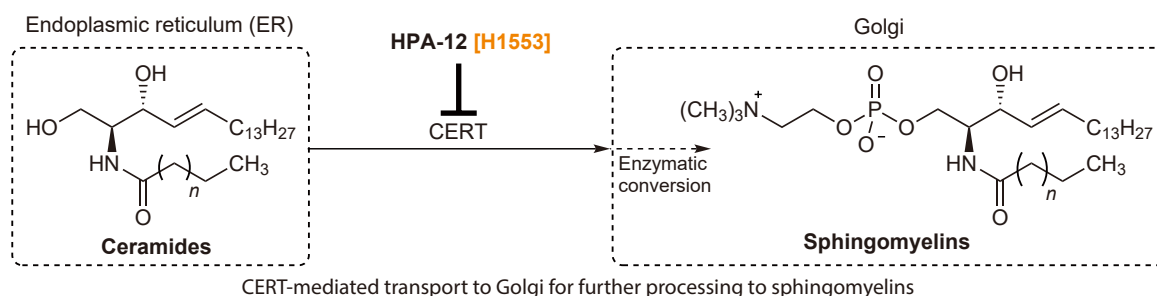


HPA-12
5 mg
[H1553]

Advantages

- Inhibits hepatitis C virus (HCV) replication and the growth of the obligate intracellular bacteria *Chlamydiae*
- Induces the resensitization of cancer cells to chemotherapeutic agents

The Inhibition of CERT by HPA-12



HPA-12 is a ceramide (Cer)-trafficking inhibitor that was first discovered and synthesized by Hanada and Kobayashi *et al.*^{1,2)} Ceramide is synthesized in the endoplasmic reticulum (ER) and is transported to the Golgi apparatus,^{3,4)} where it is converted to sphingomyelin, by means of the ceramide transport protein (CERT).⁵⁾ HPA-12 inhibits the CERT, and has been used as a CERT inhibitor in various biological science studies.⁶⁾

For example, HPA-12 possesses antiviral and antibacterial properties against the growth of hepatitis C virus (HCV) and the obligate intracellular bacteria *Chlamydiae* in cultured human cells.^{6a,d,e)} In addition, the CERT inhibition results in resensitization of cancer cells to chemotherapeutic agents such as paclitaxel.^{6b)} Therefore, the inhibition of CERT may represent medical strategies, such as anti-infective and anticancer chemotherapy.

For Laboratory Use, Research Purposes Only.

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