

PRODUCT INFORMATION



FR900359

Item No. 33666

CAS Registry No.: 107530-18-7

Formal Name: (3R)-N-acetyl-3-hydroxy-L-leucyl-(α R)- α -hydroxybenzenepropanoyl-2,3-didehydro-N-methylalanyl-L-alanyl-N-methyl-L-alanyl-(3R)-3-[[[(2S,3R)-3-hydroxy-4-methyl-1-oxo-2-[(1-oxopropyl)amino]pentyl]oxy]-L-leucyl-N,O-dimethyl-L-threonine, (7 \rightarrow 1)-lactone

Synonym: UBO-QIC

MF: C₄₉H₇₅N₇O₁₅

FW: 1,002.2

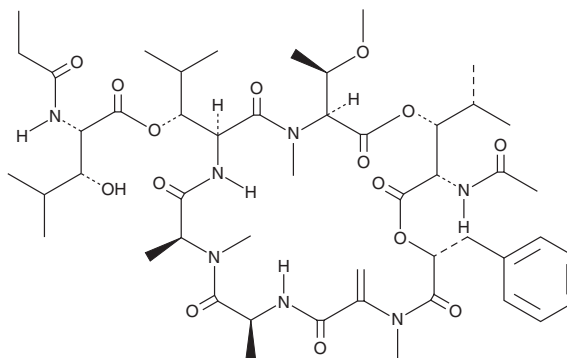
Purity: \geq 95%

Supplied as: A crystalline solid

Storage: -20°C

Stability: \geq 2 years

Item Origin: Bacteria



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

FR900359 is supplied as a crystalline solid. A stock solution may be made by dissolving the FR900359 in the solvent of choice, which should be purged with an inert gas. FR900359 is soluble in chloroform.

Description

FR900359 is a cyclic depsipeptide that has been found in *A. crenata* and is an inhibitor of G α_q , G α_{11} , and G α_{14} (IC₅₀s = 13.18, 10.47, and 10 nM, respectively).^{1,2} It is selective for these G α subunits over a panel of additional G α subunits, including G α_s and G α_i , in bioluminescence resonance energy transfer (BRET) assays at 1 μ M.³ FR900359 (1 μ M) induces relaxation of precontracted isolated mouse tail arteries and inhibits platelet aggregation induced by U-46619 (Item No. 16450) in washed isolated human platelets cultured with aspirin (Item No. 70260) in a concentration-dependent manner.^{3,4} It induces cell cycle arrest at the G₁ phase and reduces proliferation and serum-induced migration of B16 melanoma cells.³ FR900359 (2.5 μ g/animal) inhibits airway hyperresponsiveness in a mouse model of house dust mite-induced allergic asthma.⁵

References

1. Fujioka, M., Koda, S., Morimoto, Y., et al. Structure of FR900359, a cyclic depsipeptide from *Ardisia crenata* sims. *J. Org. Chem.* **53**(12), 2820-2825 (1988).
2. Kukkonen, J.P. G-protein inhibition profile of the reported G $\alpha_{q/11}$ inhibitor UBO-QIC. *Biochem. Biophys. Res. Commun.* **469**(1), 101-107 (2016).
3. Schrage, R., Schmitz, A.-L., Gaffal, E., et al. The experimental power of FR900359 to study Gq-regulated biological processes. *Nat. Commun.* **6**, 10156 (2015).
4. Inamdar, V., Patel, A., Manne, B.J., et al. Characterization of UBO-QIC as a G α_q inhibitor in platelets. *Platelets* **26**(8), 771-778 (2015).
5. Matthey, M., Roberts, R., Seidinger, A., et al. Targeted inhibition of G α_q signaling induces airway relaxation in mouse models of asthma. *Sci. Transl. Med.* **9**(407), eaag2288 (2017).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 03/13/2025

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM