

PRODUCT INFORMATION



YM-254890
Item No. 29735

CAS Registry No.: 568580-02-9
Formal Name: N-acetyl-L-threonyl-(α R)- α -hydroxybenzenepropanoyl-2,3-didehydro-N-methylalanyl-L-alanyl-N-methyl-L-alanyl-(3R)-3-[[[(2S,3R)-2-(acetylamino)-3-hydroxy-4-methyl-1-oxopentyl]oxy]-L-leucyl-N,O-dimethyl-L-threonine(7 \rightarrow 1)-lactone

MF: C₄₆H₆₉N₇O₁₅

FW: 960.1

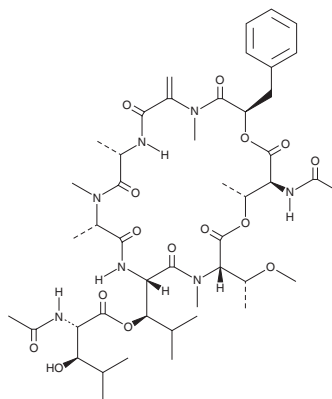
Purity: \geq 95%

Supplied as: A solid

Storage: -20°C

Stability: \geq 4 years

Item Origin: Bacterium/*Chromobacterium* sp.



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

Laboratory Procedures

YM-254890 is supplied as a solid. A stock solution may be made by dissolving the YM-254890 in the solvent of choice, which should be purged with an inert gas. YM-254890 is soluble in the organic solvent DMSO at a concentration of approximately 10 mg/ml.

Description

YM-254890 is cyclic depsipeptide originally isolated from *Chromobacterium* and an inhibitor of G $\alpha_{q/11}$.¹ It inhibits G $\alpha_{q/11}$ -mediated intracellular calcium mobilization induced by 2MeSADP or methacholine in C6-15 cells expressing the purinergic P2Y₁ receptor (IC₅₀ = 0.15 μ M) and in CHO cells expressing M₁ muscarinic acetylcholine receptors (IC₅₀ = 0.15 μ M), respectively, but has no effect on G α_i -mediated calcium mobilization induced by fMLP in HL-60 cells (IC₅₀ = >10 μ M). YM-254890 inhibits platelet aggregation induced by ADP, collagen, thrombin receptor agonist peptide (TRAP), arachidonic acid (Item Nos. 90010 | 90010.1 | 10006607), or U-46619 (Item No. 16450) in isolated human platelet-rich plasma (IC₅₀s = 0.39, 0.15, 0.71, 0.25, and 0.34 μ M, respectively).² It reduces shear stress-induced thrombus formation in isolated human whole blood. YM-254890 (1, 3, and 10 μ g/kg) reduces platelet thrombus formation in a cynomolgus monkey model of femoral artery thrombosis.

References

1. Takasaki, J., Saito, T., Taniguchi, M., et al. A Novel G $\alpha_{q/11}$ -selective Inhibitor. *J. Biol. Chem.* **279**(46), 47438-47445 (2004).
2. Uemura, T., Kawasaki, T., Taniguchi, M., et al. Biological properties of a specific G $\alpha_{q/11}$ inhibitor, YM-254890, on platelet functions and thrombus formation under high-shear stress. *Br. J. Pharmacol.* **148**(1), 61-69 (2006).

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, 09/29/2022

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