# PRODUCT INFORMATION



# Rubratoxin A

Item No. 19605

CAS Registry No.: 22467-31-8

Formal Name: (4S,5R,10R)-rel-10-[(R)-[(2R)-3,6-dihydro-

> 6-oxo-2H-pyran-2-yl]hydroxymethyl]-4,5,8,9,10,11-hexahydro-4,8-dihydroxy-5-[(1S)-1-hydroxyheptyl]-1H-cyclonona[1,2-

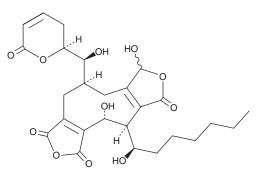
c:5,6-c']difuran-1,3,6-trione

BRN 1633008, HSDB 3532 Synonyms:

MF:  $C_{26}H_{32}O_{11}$ FW: 520.5 **Purity:** ≥95% Supplied as: A powder Storage: -20°C Stability: ≥4 years

Item Origin: Fungus/Penicillium sp. Special Conditions: Keep cool and dry

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



## **Laboratory Procedures**

Rubratoxin A is supplied as a powder. A stock solution may be made by dissolving the rubratoxin A in the solvent of choice, which should be purged with an inert gas. Rubratoxin A is soluble in acetonitrile and DMSO. Rubratoxin A is unstable in alcohols, such as methanol and ethanol, and may cause esterification.

#### Description

Rubratoxin A is a natural mycotoxin and competitive inhibitor of protein phosphatase 2A (PP2A;  $IC_{50}$  = 170 nM).<sup>1</sup> It has no significant effect on several other phosphatases, including PP1, PP2B, and protein tyrosine phosphatase 1B. Rubratoxin A drives overphosphorylation of PP2A substrate proteins in cultured cells treated for three hours at 20 μM. It causes suppression of tumor metastasis and reduction of primary tumor volume in mouse xenografts.1

#### Reference

1. Wada, S., Usami, I., Umezawa, Y., et al. Rubratoxin A specifically and potently inhibits protein phosphatase 2A and suppresses cancer metastasis. Cancer Sci. 101(3), 743-750 (2010).

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

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

uyer 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, 08/09/2023

## **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