PRODUCT INFORMATION



Benzomalvin A

Item No. 25016

CAS Registry No.:	157047-96-6
Formal Name:	(6S,7S)-6,7-dihydro-6-methyl-7-(phenylmethyl)-
	quinazolino[3,2-a][1,4]benzodiazepine-5,13-dione
Synonym:	(-)-Benzomalvin A
MF:	C ₂₄ H ₁₉ N ₃ O ₂
FW:	381.4
Purity:	≥95%
Supplied as:	A solid
Storage:	-20°C
Stability:	≥4 years
Information represents	the product specifications. Batch specific analytical results are provided on each certificate of a

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

Laboratory Procedures

Benzomalvin A is supplied as a solid. A stock solution may be made by dissolving the benzomalvin A in the solvent of choice, which should be purged with an inert gas. Benzomalvin A is soluble in organic solvents such as methanol, ethanol, DMSO, and dimethyl formamide.

Description

Benzomalvin A is a fungal metabolite produced by Penicillium^{1,2} It inhibits yeast α -glucosidase in vitro (IC₅₀ = 383.2 µM).¹ In vivo, benzomalvin A (3.1-31.6 mg/kg) decreases plasma glucose levels in mice following administration of sucrose. It also decreases the plasma glucose postprandial peak in nicotinamidestreptozotocin-induced hyperglycemic mice when administered at a dose of 10 mg/kg. Benzomalvin A also acts as an antagonist of neurokinin-1 (NK1) receptors, inhibiting binding of substance P (Item No. 24035) to guinea pig, rat, and human NK₁ (K_is = 12, 42, and 43 μ M, respectively).²

References

- 1. Del Valle, P., Martinez, A.L., Figueroa, M., et al. Alkaloids from the fungus Penicillium spathulatum as α-glucosidase inhibitors. Planta Med. 82(14), 1286-1294 (2016).
- 2. Sun, H.H., Barrow, C.J., Sedlock, D.M., et al. Benzomalvins, new substance P inhibitors from a Penicillium sp. J. Antibiot. (Tokyo) 47(5), 515-522 (1994).

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.

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, 12/19/2022

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