

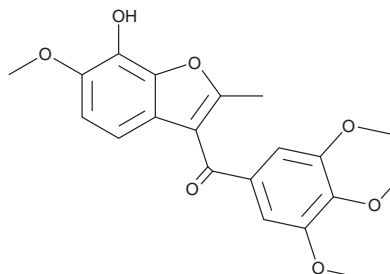
PRODUCT INFORMATION



BNC-105

Item No. 36930

CAS Registry No.: 945771-74-4
Formal Name: (7-hydroxy-6-methoxy-2-methyl-3-benzofuranyl)(3,4,5-trimethoxyphenyl)-methanone
MF: $C_{20}H_{20}O_7$
FW: 372.4
Purity: $\geq 98\%$
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 analysis.

Laboratory Procedures

BNC-105 is supplied as a solid. A stock solution may be made by dissolving the BNC-105 in the solvent of choice, which should be purged with an inert gas. BNC-105 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of BNC-105 in these solvents is approximately 5 mg/ml.

Description

BNC-105 is an inhibitor of tubulin polymerization.¹ It inhibits bovine tubulin polymerization in a cell-free assay ($EC_{50} = 3 \mu\text{M}$). BNC-105 inhibits the proliferation of human umbilical vein endothelial cells (HUVECs) and human abdominal aorta endothelial cells (HAAECs; EC_{50} s = 0.31 and 0.1 nM, respectively). It inhibits the proliferation of MCF-7 breast cancer cells ($IC_{50} = 2.4 \text{ nM}$), as well as a panel of 9 additional cancer cell lines (IC_{50} s = 0.16-18.4 nM).² BNC-105 (1 nM) inhibits HUVEC capillary tube formation in a Matrigel™ assay.³

References

1. Kremmidiotis, G., Leske, A.F., Lavranos, T.C., *et al.* BNC105: A novel tubulin polymerization inhibitor that selectively disrupts tumor vasculature and displays single-agent antitumor efficacy. *Mol. Cancer Ther.* **9**(6), 1562-1573 (2010).
2. Flynn, B.L., Gill, G.S., Grobelny, D.W., *et al.* Discovery of 7-hydroxy-6-methoxy-2-methyl-3-(3,4,5-trimethoxybenzoyl)benzo[b]furan (BNC105), a tubulin polymerization inhibitor with potent antiproliferative and tumor vascular disrupting properties. *J. Med. Chem.* **54**(17), 6014-6027 (2011).

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, 12/21/2022

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