

Produktinformation



Forschungsprodukte & Biochemikalien
Zellkultur & Verbrauchsmaterial
Diagnostik & molekulare Diagnostik
Laborgeräte & Service

Weitere Information auf den folgenden Seiten! See the following pages for more information!



Lieferung & Zahlungsart siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien T. +43(0)1 489 3961-0 F. +43(0)1 489 3961-7 <u>mail@szabo-scandic.com</u> www.szabo-scandic.com

PRODUCT INFORMATION



Morusin

Item No. 28857

CAS Registry No.:	62596-29-6	ОН
Formal Name:	2-(2,4-dihydroxyphenyl)-5-	
	hydroxy-8,8-dimethyl-3-(3-	
	methyl-2-buten-1-yl)-4H,8H-	
	benzo[1,2-b:3,4-b']dipyran-4-one	
Synonyms:	Mulberrochromene, NSC 649220	НО
MF:	$C_{25}H_{24}O_{6}$	
FW:	420.5	
Purity:	≥98%	Ŭ ĺ
UV/Vis.:	λ _{max} : 271 nm	$\land \land \land \land$
Supplied as:	A solid	
Storage:	-20°C	
Stability:	≥2 years	ОН
Item Origin:	Plant/Cortex mori	

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

Laboratory Procedures

Morusin is supplied as a solid. A stock solution may be made by dissolving the morusin in the solvent of choice, which should be purged with an inert gas. Morusin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of morusin in these solvents is approximately 15, 10, and 20 mg/ml, respectively.

Morusin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, morusin should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Morusin has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Morusin is a prenylated flavonoid that has been found in M. alba and has diverse biological activities, including enzyme inhibitory, anti-inflammatory, and antiproliferative properties.^{1,2,3,4} It inhibits the UDP-glucuronosyltransferase (UGT) isoforms UGT1A6, UGT1A7, and UGT1A8 (IC₅₀s = 4.23, 0.98, and 3 μ M, respectively) and the cytochrome P450 (CYP) isoforms CYP3A4, CYP1A2, CYP2C9, and CYP2E1 ($IC_{50}s = 2.13$, 1.27, 3.18, and 9.28 μ M, respectively).¹ Morusin (4 μ M) inhibits histamine and leukotriene C₄ (LTC₄) production induced by A23187 (Item No. 11016) and phorbol 12-myristate 13-acetate (PMA; Item No. 10008014) in mouse MC/9 mast cells.² It also inhibits the growth of MCF-7, MDA-MB-231, and MDA-MB-453 breast cancer cells $(IC_{50}s = 13.53, 10.84, and 11.99 \mu M, respectively).³ Morusin (12.5 mg/kg per day) decreases colonic tissue$ damage, TGF- β 1 levels, and matrix metalloproteinase-2 (MMP-2) and MMP-9 activity in a rat model of TNBS-induced ulcerative colitis.⁴

References

- 1. Shi, X., Yang, S., Zhang, G., et al. Xenobiotica 46(5), 467-476 (2016).
- 2. Jin, S.E., Ha, H., Shin, H.K., et al. Molecules 24(2), E265 (2019).
- 3. Kang, S., Kim, E.O., Kim, S.H., et al. Oncol. Lett. 13(6), 4558-4562 (2017).
- 4. Vochyánová, Z., Pokorná, M., Rotrekl, D., et al. PLoS One 12(8), e0182464 (2017).

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

SAFFTY 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, 11/15/2019

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