

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



Casticin

Item No. 16976

| CAS Registry No.: | 479-91-4 | ОН |
|-------------------|--|---------|
| Formal Name: | 5-hydroxy-2-(3-hydroxy-4-methoxyphenyl)-3,6,7- | |
| | trimethoxy-4H-1-benzopyran-4-one | |
| Synonym: | Vitexicarpin | |
| MF: | C ₁₉ H ₁₈ O ₈ | |
| FW: | 374.3 | |
| Purity: | ≥98% | |
| UV/Vis.: | λ _{max} : 210, 258, 350 nm | |
| Supplied as: | A crystalline solid | O T T O |
| Storage: | -20°C | о́н О |
| Stability: | ≥2 years | |
| 1 6 1 | | |

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

Laboratory Procedures

Casticin is supplied as a crystalline solid. A stock solution may be made by dissolving the casticin in the solvent of choice. Casticin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of casticin in these solvents is approximately 5, 10, and 20 mg/ml, respectively.

Casticin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, casticin should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Casticin has a solubility of approximately 1 mg/ml in a 1:5 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Casticin is a flavonol isolated from A. annua, V. trifolia, and V. agnus-castus that decreases proliferation in K562, HL-60, and Kasumi-1 leukemia cell lines (IC₅₀s = 5.95, 4.82, and 15.56 μ M, respectively).¹ It blocks TGF- β /SMAD signaling in LX2 cells preventing activation, inhibiting proliferation, and inducing apoptosis of these hepatic stellate cells.² In a mouse model of liver fibrosis, casticin (20 mg/kg) decreases TGF-β1 mRNA and phosphorylated SMAD (p-SMAD) levels. Casticin induces apoptosis in hepatocellular carcinoma (HCC) and breast cancer cells.^{3,4} It also downregulates Twist and prevents the epithelial-mesenchymal transition (EMT) in human HCC SMMC-7721 cells.³

References

- 1. Shen, J.-K., Du, H.-P., Yang, M., et al. Casticin induces leukemic cell death through apoptosis and mitotic catastrophe. Ann. Hematol. 88(8), 743-752 (2009).
- 2. Zhou, L., Dong, X., Wang, L., et al. Casticin attenuates liver fibrosis and hepatic stellate cell activation by blocking TGF-β/Smad signaling pathway. Oncotarget (2017).
- He, M., Cao, X.C., He, G.C., et al. Casticin inhibits epithelial-mesenchymal transition of liver cancer stem cells of the SMMC-7721 cell line through downregulating Twist. Oncol. Lett. 7(5), 1625-1631 (2014).
- 4. Liu, L.P., Cao, X.C., Liu, F., et al. Casticin induces breast cancer cell apoptosis by inhibiting the expression of forkhead box protein M1. Oncol. Lett. 7(5), 1711-1717 (2014).

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

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.

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, 06/15/2017