SZABO SCANDIC

Part of Europa Biosite

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

mail@szabo-scandic.com

www.szabo-scandic.com

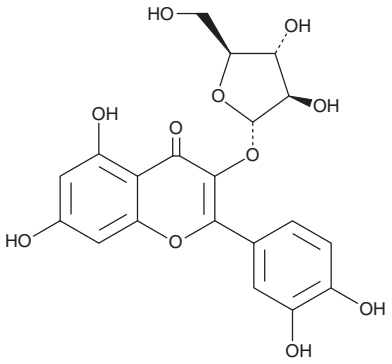
linkedin.com/company/szaboscandic

PRODUCT INFORMATION

Avicularin

Item No. 33918

CAS Registry No.:	572-30-5
Formal Name:	3-(α-L-arabinofuranosyloxy)-2-(3,4-dihydroxyphenyl)-5,7-dihydroxy-4H-1-benzopyran-4-one
Synonym:	Quercetin 3-O-α-L-arabinofuranoside
MF:	$C_{20}H_{18}O_{11}$
FW:	434.4
Purity:	≥98%
UV/Vis.:	λ_{max}: 258, 359 nm
Supplied as:	A solid
Storage:	-20°C
Stability:	≥2 years
Item Origin:	Synthetic



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

Laboratory Procedures

Avicularin is supplied as a solid. A stock solution may be made by dissolving the avicularin in the solvent of choice, which should be purged with an inert gas. Avicularin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of avicularin in these solvents is approximately 5, 30, and 50 mg/ml, respectively.

Description

Avicularin is a flavonoid glycoside that has been found in *R. sachalinensis* and has diverse biological activities.[1-5] It inhibits fatty acid synthase (FASN) and aldose reductase (IC_{50}s = 6.15 and 19.05 µM for the chicken liver and human enzymes, respectively).[1,2] Avicularin scavenges DPPH and superoxide radicals, as well as inhibits copper-induced oxidation of LDL in cell-free assays (IC_{50}s = 64.3, 6, and 3.8 µM, respectively).[3] It inhibits LPS-induced increases in nitric oxide (NO) and prostaglandin E_2 (PGE_2; Item No. 14010) production in RAW 264.7 macrophages when used at concentrations ranging from 30 to 300 µM.[4] Avicularin (100 µg/ml) inhibits the proliferation, migration, and invasion of, as well as induces apoptosis and cell cycle arrest at the G_0/G_1 phase in, Huh7 hepatocellular carcinoma cells.[5]

References

1. Abramson, H.N. The lipogenesis pathway as a cancer target. *J. Med. Chem.* **54(16)**, 5615-5638 (2011).
2. Naeem, S., Hylands, P., and Barlow, D. Construction of an Indonesian herbal constituents database and its use in Random Forest modelling in a search for inhibitors of aldose reductase. *Bioorg. Med. Chem.* **20(3)**, 1251-1258 (2012).
3. Zhang, X., Thuong, P.T., Jin, W., *et al.* Antioxidant activity of anthraquinones and flavonoids from flower of *Reynoutria sachalinensis*. *Arch. Pharm. Res.* **28(1)**, 22-27 (2005).
4. Vo, V.A., Lee, J.-W., Chang, J.-E., *et al.* Avicularin inhibits lipopolysaccharide-induced inflammatory response by suppressing ERK phosphorylation in RAW 264.7 macrophages. *Biomol. Ther. (Seoul)* **20(6)**, 532-537 (2012).
5. Wang, Z., Li, F., Quan, Y., *et al.* Avicularin ameliorates human hepatocellular carcinoma via the regulation of NF-κB/COX-2/PPAR-γ activities. *Mol. Med. Rep.* **19(6)**, 5417-5423 (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