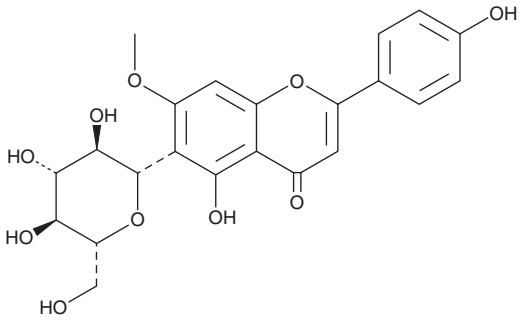
PRODUCT INFORMATION

Swertisin

Item No. 34744

CAS Registry No.:	6991-10-2
Formal Name:	6-β-D-glucopyranosyl-5-hydroxy-2-(4-hydroxyphenyl)-7-methoxy-4H-1-benzopyran-4-one
Synonym:	NSC 641547
MF:	$C_{22}H_{22}O_{10}$
FW:	446.4
Purity:	≥98%
UV/Vis.:	λ_{max}: 216, 243, 276, 342 nm
Supplied as:	A solid
Storage:	-20°C
Stability:	≥4 years
Item Origin:	Plant/*Swertia bimaculata*



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

Laboratory Procedures

Swertisin is supplied as a solid. A stock solution may be made by dissolving the swertisin in the solvent of choice, which should be purged with an inert gas. Swertisin is soluble in DMSO.

Description

Swertisin is a flavonoid C-glycoside that has been found in *Swertia japonica* and has diverse biological activities.[1-3] It inhibits sodium-glucose cotransporter 2 (SGLT2) in HEK293 cells when used at a concentration of 7.5 µg/ml and is an adenosine A_1 receptor antagonist (IC_{50} = 137 µM).[1,2] Swertisin (0.2-5 µM) inhibits hepatitis B virus (HBV) replication in HepG2 2.2.15 cells.[3] It decreases blood glucose levels in a mouse model of diabetes induced by streptozotocin (Item No. 13104), as well as prevents scopolamine-induced increases in escape latency in the Morris water maze in mice.[1,2]

References

1. Bhardwaj, G., Vakani, M., Srivastava, A., *et al.* Swertisin, a novel SGLT2 inhibitor, with improved glucose homeostasis for effective diabetes therapy. *Arch. Biochem. Biophys.* **710**, 108995 (2021).
2. Lee, H.E., Jeon, S.J., Ryu, B., *et al.* Swertisin, a C-glucosylflavone, ameliorates scopolamine-induced memory impairment in mice with its adenosine A1 receptor antagonistic property. *Behav. Brain Res.* **306**, 137-145 (2016).
3. Xu, H.-Y., Ren, J.-H., Su, Y., *et al.* Anti-hepatitis B virus activity of swertisin isolated from *Iris tectorum* Maxim. *J. Ethnopharmacol.* **257**, 112787 (2020).

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