

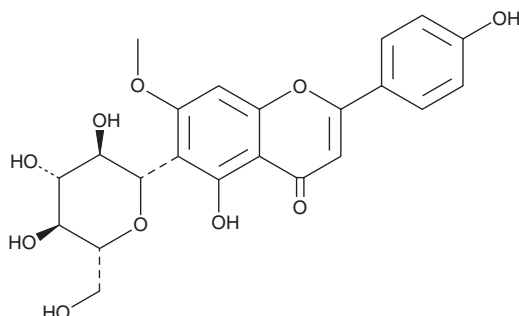
# PRODUCT INFORMATION



## 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<sub>22</sub>H<sub>22</sub>O<sub>10</sub>  
**FW:** 446.4  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 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.<sup>1-3</sup> 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<sub>1</sub> receptor antagonist (IC<sub>50</sub> = 137 μM).<sup>1,2</sup> Swertisin (0.2-5 μM) inhibits hepatitis B virus (HBV) replication in HepG2 2.2.15 cells.<sup>3</sup> 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.<sup>1,2</sup>

### 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 A<sub>1</sub> 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).

#### 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.

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