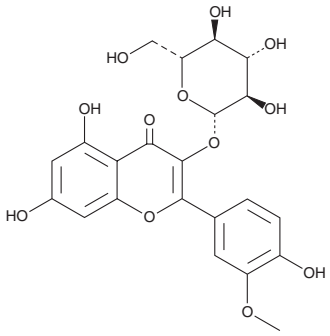
PRODUCT INFORMATION

Isorhamnetin-3-O-β-D-Glucoside

Item No. 35600

CAS Registry No.:	5041-82-7
Formal Name:	3-(β-D-glucopyranosyloxy)-5,7-dihydroxy-2-(4-hydroxy-3-methoxyphenyl)-4H-1-benzopyran-4-one
Synonym:	3'-O-Methylquercetin 3'-glucoside
MF:	$C_{22}H_{22}O_{12}$
FW:	478.4
Purity:	≥98%
UV/Vis.:	λ_{max}: 255, 360 nm
Supplied as:	A solid
Storage:	-20°C
Stability:	≥4 years
Item Origin:	Plant/*Ilex cornuta*



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

Laboratory Procedures

Isorhamnetin-3-O-β-D-glucoside is supplied as a solid. A stock solution may be made by dissolving the isorhamnetin-3-O-β-D-glucoside in the solvent of choice, which should be purged with an inert gas. Isorhamnetin-3-O-β-D-glucoside is soluble in DMSO.

Description

Isorhamnetin-3-O-β-D-glucoside is a flavonoid glycoside that has been found in *T. capensis* and has diverse biological activities.[1,2] It scavenges DPPH (Item No. 14805) and ABTS (Item No. 27317) radicals in cell-free assays (IC_{50}s = 3.16 and 44.93 µg/ml, respectively).[1] Isorhamnetin-3-O-β-glucoside inhibits *H. contortus* egg hatching and larval development (EC_{50}s = 431.5 and 55.61 µg/ml, respectively) and induces lethality in *C. elegans* (EC_{50} = 342 µg/ml). It inhibits rat lens aldose reductase (IC_{50} = 0.75 µg/ml) and reduces sorbitol accumulation in lenses, red blood cells, and sciatic nerve in a rat model of diabetes induced by streptozotocin (STZ; Item No. 13104).[2]

References

1. Ondua, M., Mfotie Njoya, E., Abdalla, M.A., *et al.* Investigation of anthelmintic activity of the acetone extract and constituents of *Typha capensis* against animal parasitic *Haemonchus contortus* and free-living *Caenorhabditis elegans*. *Parasitol. Res.* **120(10)**, 3437-3449 (2021).
2. Lee, Y.S., Lee, S., Lee, H.S., *et al.* Inhibitory effects of isorhamnetin-3-*O*-β-D-glucoside from *Salicornia herbacea* on rat lens aldose reductase and sorbitol accumulation in streptozotocin-induced diabetic rat tissues. *Biol. Pharm. Bull.* **28(5)**, 916-918 (2005).

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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