

PRODUCT INFORMATION

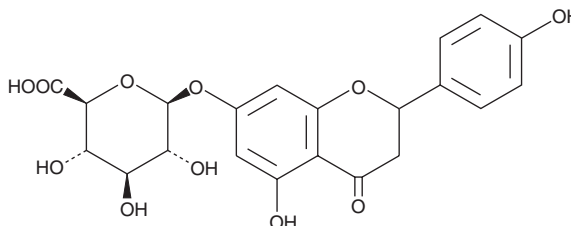


Naringenin-7-O-β-D-Glucuronide

Item No. 10388

CAS Registry No.: 1237479-07-0
Formal Name: 3,4-dihydro-5-hydroxy-2-(4-hydroxyphenyl)-4-oxo-2H-1-benzopyran-7-yl, β-D-glucopyranosiduronic acid

MF: C₂₁H₂₀O₁₁
FW: 448.4
Purity: ≥98%
UV/Vis.: λ_{max}: 213, 283 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Naringenin-7-O-β-D-glucuronide is supplied as a crystalline solid. A stock solution may be made by dissolving the naringenin-7-O-β-D-glucuronide in the solvent of choice, which should be purged with an inert gas. Naringenin-7-O-β-D-glucuronide is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of naringenin-7-O-β-D-glucuronide in these solvents is approximately 10, 20, and 30 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of naringenin-7-O-β-D-glucuronide can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of naringenin-7-O-β-D-glucuronide in PBS (pH 7.2) is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Naringenin-7-O-β-D-glucuronide is a metabolite of the flavonoid naringenin (Item No. 14173).¹ It is formed from naringenin primarily by the UDP-glucuronosyltransferase (UGT) isoforms UGT1A1, UGT1A3, UGT1A6, and UGT1A9.²

Reference

1. Pereira-Caro, G., Borges, G., van der Hooft, J., *et al.* Orange juice (poly)phenols are highly bioavailable in humans. *Am. J. Clin. Nutr.* **100**(5), 1378-1384 (2014).
2. Robotham, S.A. and Brodbelt, J.S. Identification of flavone glucuronide isomers by metal complexation and tandem mass spectrometry: Regioselectivity of uridine 5'-diphosphate-glucuronosyltransferase isozymes in the biotransformation of flavones. *J. Agric. Food Chem.* **61**(7), 1457-1463 (2013).

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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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