

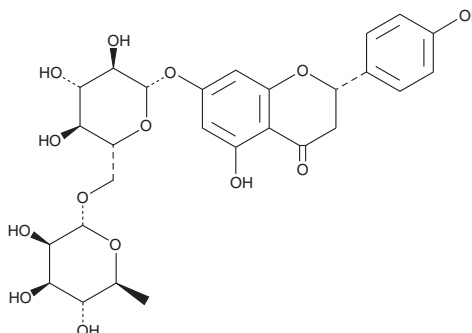
PRODUCT INFORMATION



Narirutin

Item No. 25124

CAS Registry No.: 14259-46-2
Formal Name: (2S)-7-[[6-O-(6-deoxy- α -L-mannopyranosyl)- β -D-glucopyranosyl]oxy]-2,3-dihydro-5-hydroxy-2-(4-hydroxyphenyl)-4H-1-benzopyran-4-one
Synonyms: Naringenin-7-O-rutinoside, (2S)-Narirutin
MF: C₂₇H₃₂O₁₄
FW: 580.5
Purity: \geq 98%
UV/Vis.: λ_{max} : 212, 226, 284, 332 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 4 years



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

Laboratory Procedures

Narirutin is supplied as a crystalline solid. A stock solution may be made by dissolving the narirutin in the solvent of choice, which should be purged with an inert gas. Narirutin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of narirutin in these solvents is approximately 1, 10, and 20 mg/ml, respectively.

Narirutin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, narirutin should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Narirutin has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Narirutin is a flavanone originally isolated from *C. paradisi* that has anti-inflammatory and antidepressant-like activities.¹ It reduces airway sensitivity, eosinophil counts and IL-4 levels in bronchoalveolar lavage fluid (BALF), and serum IgE levels in an ovalbumin mouse model of allergic eosinophilic airway inflammation when administered at a dose of 10 mg/kg.² Narirutin decreases immobility in the forced swim test and latency to feeding in the novelty-suppressed feeding test, indicating antidepressant-like activity in a mouse model of chronic mild stress-induced depression.³

References

1. Mizelle, J.W., Dunlap, W.J., Hagen, R.E., *et al.* Isolation and identification of some flavanone rutinosides of the grapefruit *Anal. Biochem.* **12(2)**, 316-324 (1965).
2. Funaguchi, N., Ohno, Y., La, B.L.B., *et al.* Narirutin inhibits airway inflammation in an allergic mouse model. *Clin. Exp. Pharmacol. Physiol.* **34(8)**, 766-770 (2007).
3. Li, Y., Du, Y., Yang, J., *et al.* Narirutin produces antidepressant-like effects in a chronic unpredictable mild stress mouse model. *Neuroreport.* **29(15)**, 1264-1268 (2018).

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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