

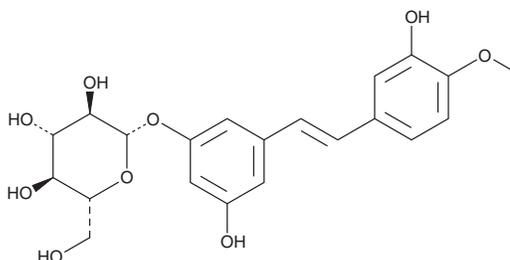
PRODUCT INFORMATION



Rhapontin

Item No. 19867

CAS Registry No.: 155-58-8
Formal Name: 3-hydroxy-5-[(1E)-2-(3-hydroxy-4-methoxyphenyl)ethenyl]phenyl-β-D-glucopyranoside
Synonyms: NSC 43321, Rhaponticin, *trans*-Rhapontin
MF: C₂₁H₂₄O₉
FW: 420.4
Purity: ≥98%
UV/Vis.: λ_{max}: 220, 325 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

Rhapontin is supplied as a crystalline solid. A stock solution may be made by dissolving the rhapontin in the solvent of choice, which should be purged with an inert gas. Rhapontin is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of rhapontin in these solvents is approximately 30 and 50 mg/ml, respectively.

Rhapontin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, rhapontin should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Rhapontin has a solubility of approximately 0.14 mg/ml in a 1:6 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Rhapontin is a natural stilbenoid glycoside first isolated from rhubarb rhizomes. It is converted by glucosidases to rhapontigenin (Item No. 13293), a resveratrol analog with antioxidant and anti-cancer activity.¹⁻³ Rhapontigenin derived enzymatically from rhapontin has also been found to have antibiotic activity as well as inhibit melanin synthesis.^{4,5}

References

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2. Roupe, K. A., Helms, G. L., Halls, S. C., *et al.* Preparative enzymatic synthesis and HPLC analysis of rhapontigenin: Applications to metabolism, pharmacokinetics and anti-cancer studies. *J. Pharm. Pharm. Sci.* **8(3)**, 374-386 (2005).
3. Roberti, M., Pizzirani, D., Simoni, D., *et al.* Synthesis and biological evaluation of resveratrol and analogues as apoptosis-inducing agents. *J. Med. Chem.* **46**, 3546-3554 (2003).
4. Kim, J. K., Kim, N., and Lim, Y. H., Evaluation of the antibacterial activity of rhapontigenin produced from rhapontin by biotransformation against *Propionibacterium acnes*. *J. Microbiol. Biotechnol.* **20(1)**, 82-87 (2010).
5. Lee, H. S., Kim, J. K., Park, K. T., *et al.* Rhapontigenin converted from rhapontin purified from *Rheum undulatum* enhances the inhibition of melanin synthesis. *Biosci. Biotechnol. Biochem.* **76(12)**, 2307-2309 (2012).

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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