

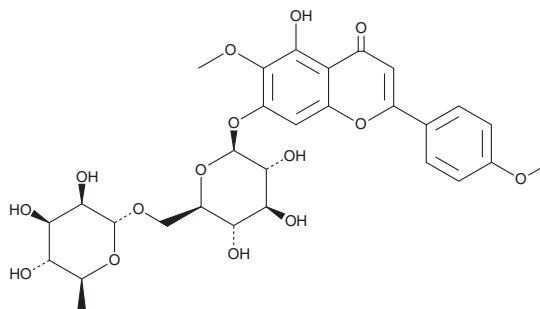
PRODUCT INFORMATION



Pectolinarin

Item No. 46336

CAS Registry No.: 28978-02-1
Formal Name: 7-[[6-O-(6-deoxy- α -L-mannopyranosyl)- β -D-glucopyranosyl]oxy]-5-hydroxy-6-methoxy-2-(4-methoxyphenyl)-4H-1-benzopyran-4-one
MF: $C_{29}H_{34}O_{15}$
FW: 622.6
Purity: $\geq 98\%$
Supplied as: A solid
Storage: -20°C
Stability: ≥ 4 years
Item Origin: Plant/*Cirsium japonicum*



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

Laboratory Procedures

Pectolinarin is supplied as a solid. A stock solution may be made by dissolving the pectolinarin in the solvent of choice, which should be purged with an inert gas. Pectolinarin is sparingly soluble (1-10 mg/ml) in DMSO.

Description

Pectolinarin is a flavone glycoside originally isolated from *L. vulgaris* that has diverse biological activities.¹⁻⁶ It inhibits hydrogen peroxide-induced reactive oxygen species (ROS) accumulation and apoptosis in SK-N-SH cells.² Pectolinarin (10-20 mg/kg, p.o.) reduces hepatic damage and lipid peroxidation and increases the activity of hepatic superoxide dismutase (SOD) in a rat model of liver injury induced by D-galactosamine (Item No. 22981).³ It reduces ear edema induced by arachidonic acid (Item Nos. 90010 | 90010.1 | 10006607) in mice and inhibits the passive cutaneous anaphylaxis (PCA) reaction in rats.⁴ Pectolinarin reduces proliferation in a variety of cancer cells (IC_{50} s = 5.03-14.12 μM) but not MRC-5 fibroblasts (IC_{50} s = >80 μM).⁵ It also increases complement hemolytic activity in an H22 hepatoma mouse allograft model and increases lymphocyte proliferation and spleen and thymus weights while reducing tumor weight in H22 and Sarcoma 180 mouse allograft models at 50 mg/kg.⁶

References

1. Cheriet, T., Ben-Bachir, B., Thamri, O., *et al.* Isolation and biological properties of the natural flavonoids pectolinarin and pectolinarigenin-A review. *Antibiotics (Basel)* **9**(7), 417 (2020).
2. Chung, M.J., Lee, S., Park, Y.I., *et al.* Neuroprotective effects of phytosterols and flavonoids from *Cirsium setidens* and *Aster scaber* in human brain neuroblastoma SK-N-SH cells. *Life Sci.* **148**, 173-182 (2016).
3. Yoo, Y.-M., Nam, J.-H., Kim, M.-Y., *et al.* Pectolinarin and pectolinarigenin of *Cirsium setidens* prevent the hepatic injury in rats caused by D-Galactosamine via an antioxidant mechanism. *Biol. Pharm. Bull.* **31**(4), 760-764 (2008).
4. Lim, H., Son, K.H., Chang, H.W., *et al.* Anti-inflammatory activity of pectolinarigenin and pectolinarin isolated from *Cirsium chanroenicum*. *Biol. Pharm. Bull.* **31**(11), 2063-2067 (2008).
5. Tundis, R., Deguin, B., Loizzo, M.R., *et al.* Potential antitumor agents: Flavones and their derivatives from *Linaria reflexa* Desf. *Bioorg. Med. Chem. Lett.* **15**(21), 4757-4760 (2005).
6. Liu, S., Luo, X., Li, D., *et al.* Tumor inhibition and improved immunity in mice treated with flavone from *Cirsium japonicum* DC. *Int. Immunopharmacol.* **6**(9), (2006).

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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