

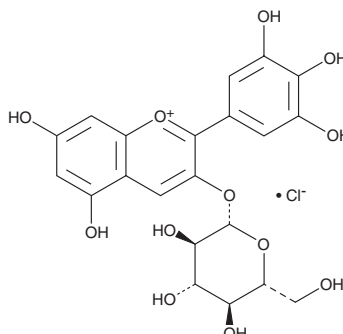
PRODUCT INFORMATION



Delphinidin-3-β-D-glucoside (chloride)

Item No. 16093

CAS Registry No.: 6906-38-3
Formal Name: 3-(β-D-glucopyranosyloxy)-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-1-benzopyrylium, monochloride
Synonyms: Delphinidin-3-O-glucoside, Delphinin, Myrtilin
MF: C₂₁H₂₁O₁₂ • Cl
FW: 500.8
Purity: ≥98%
UV/Vis.: λ_{max}: 279, 353, 541 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

Delphinidin-3-β-D-glucoside (chloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the delphinidin-3-β-D-glucoside (chloride) in the solvent of choice, which should be purged with an inert gas. Delphinidin-3-β-D-glucoside (chloride) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of delphinidin-3-β-D-glucoside (chloride) in these solvents is approximately 10 and 1.5 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 delphinidin-3-β-D-glucoside (chloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of delphinidin-3-β-D-glucoside (chloride) in PBS (pH 7.2) is approximately 0.2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Delphinidin-3-β-D-glucoside is a natural anthocyanin found in plants. It is the 3-glucoside of delphinidin. Anthocyanins, including delphinidin-3-β-D-glucoside, are potent antioxidants.¹⁻³

References

1. Cui, C., Zhang, S., You, L., *et al.* Antioxidant capacity of anthocyanins from *Rhodomyrtus tomentosa* (Ait.) and identification of the major anthocyanins. *Food Chem.* **139**(1-4), 1-8 (2013).
2. Wu, S.B., Dastmalchi, K., Long, C., *et al.* Metabolite profiling of jaboticaba (*Myrciaria cauliflora*) and other dark-colored fruit juices. *J. Agric. Food Chem.* **60**(30), 7513-7525 (2012).
3. Rice-Evans, C.A., Miller, N.J., and Paganga, G. Structure-antioxidant activity relationships of flavonoids and phenolic acids. *Free Radic. Biol. Med.* **20**(7), 933-956 (1996).

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