PRODUCT INFORMATION



Apigeninidin (chloride)

Item No. 19756

| CAS Registry No.: | 1151-98-0 | |
|-------------------|---|-------------------|
| Formal Name: | 5,7-dihydroxy-2-(4-hydroxyphenyl)- | OH |
| | 1-benzopyrylium, monochloride | |
| Synonym: | 3-desoxy Pelargonidin | HOOt |
| MF: | $C_{15}H_{11}O_4 \bullet CI$ | |
| FW: | 290.7 | |
| Purity: | ≥98% | • Cl ⁻ |
| UV/Vis.: | λ _{max} : 246, 279, 328, 485 nm | |
| Supplied as: | A crystalline solid | ОН |
| Storage: | -20°C | |
| Stability: | As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly | |

Laboratory Procedures

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

Description

Apigeninidin is a natural 3-deoxyanthocyanidin that can be isolated from leaves of sorghum.¹ The synthesis of apigeninidin is increased, particularly in leaves of S. bicolor, after wounding or pathogen invasion, resulting in purple coloration.² Apigeninidin has antibiotic and antifungal properties.^{3,4} It can be used to stain collagen fibers, muscles, and red blood cells in animal tissue sections.⁵

References

- 1. Stafford, H.A. Relationships between the development of adventitious roots and the biosynthesis of anthocyanins in first internodes of sorghum. Plant Physiol. 43(3), 318-326 (1968).
- 2. Kawahigashi, H., Kasuja, S., Sawada, Y., et al. The sorghum gene for leaf color changes upon wounding (P) encodes a flavanone 4-reductase in the 3-Deoxyanthocyanidin biosynthesis pathway. G3 (Bethesda) 6(5), 1439-1447 (2016).
- 3. Schutt, C. and Netzly, D. Effect of apiforol and apigeninidin on growth of selected fungi. J. Chem. Ecol. 17(11), 2261-2266 (1991).
- 4. Stonecipher, L.L., Hurley, P.S. and Netzly, D.H. Effect of apigeninidin on the growth of selected bacteria J. Chem. Ecol. 19(5), 1021-1027 (1993).
- 5. Avwioro, O.G., Aloamaka, C.P., Olabampe, O.B., et al. Collagen and muscle stain obtained from Sorghum bicolor. Scand. J. Clin. Lab. Invest. 66(2), 161-167 (2006).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFFTY 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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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