

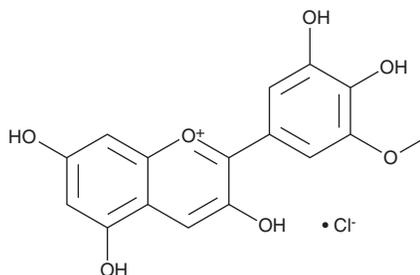
# PRODUCT INFORMATION



## Petunidin (chloride)

Item No. 19755

**CAS Registry No.:** 1429-30-7  
**Formal Name:** 2-(3,4-dihydroxy-5-methoxyphenyl)-3,5,7-trihydroxy-1-benzopyrylium, monochloride  
**Synonym:** Petunidol  
**MF:** C<sub>16</sub>H<sub>13</sub>O<sub>7</sub> • Cl  
**FW:** 352.7  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 573 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

Petunidin (chloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the petunidin (chloride) in the solvent of choice, which should be purged with an inert gas. Petunidin (chloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of petunidin (chloride) in ethanol and DMSO is approximately 15 mg/ml and approximately 25 mg/ml in DMF.

Petunidin (chloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, petunidin (chloride) should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Petunidin (chloride) has a solubility of approximately 0.1 mg/ml in a 1:9 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Petunidin is an O-methylated anthocyanidin derived from delphinidin (Item No. 11012) that imparts blue-red pigments to flowers, fruits, and red wine. It has been shown to bind with and suppress the activity of focal adhesion kinase and to inhibit platelet-derived growth factor-induced aortic smooth muscle cell migration, which may confer a protective effect against atherosclerosis.<sup>1</sup> Extracts from *E. jambolana* fruit, which is rich in anthocyanins including petunidin, have been used to suppress the proliferation of an HCT116 colon cancer cell line, as well as colon cancer stem cells.<sup>2</sup>

### References

1. Son, J. E., Lee, E. S., S., Jung, S. K., *et al.* Anthocyanidins, novel FAK inhibitors, attenuate PDGF-BB-induced aortic smooth muscle cell migration and neointima formation. *Cardiovasc. Res.* **101(3)**, 503-512 (2014).
2. Charepalli, V., Reddivari, L., Vadde, R., *et al.* *Eugenia jambolana* (Java Plum) fruit extract exhibits anti-cancer activity against early stage human HCT-116 colon cancer cells and colon cancer stem cells. *Cancers (Basel)* **8(3)**, (2016).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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