



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### Zuschläge

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- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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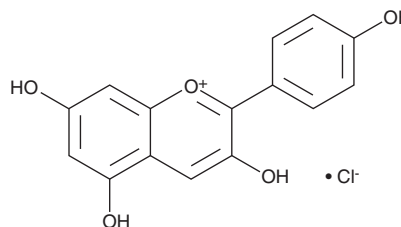
# PRODUCT INFORMATION



## Pelargonidin (chloride)

Item No. 19753

**CAS Registry No.:** 134-04-3  
**Formal Name:** 3,5,7-trihydroxy-2-(4-hydroxyphenyl)-1-benzopyrylium, monochloride  
**MF:** C<sub>15</sub>H<sub>11</sub>O<sub>5</sub> • Cl  
**FW:** 306.7  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 269, 426, 524 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥2 years



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

### Laboratory Procedures

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

Pelargonidin (chloride) is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

### Description

Pelargonidin is an anthocyanidin that has been found in *P. granatum* and has diverse biological activities.<sup>1-4</sup> It scavenges superoxide anions in cell-free assays (IC<sub>50</sub> = 130 µg/ml) and inhibits hydrogen peroxide-induced lipid peroxidation in rat brain homogenates (IC<sub>50</sub> = 85 µM).<sup>1</sup> Pelargonidin (3 mg/kg) reduces serum levels of alanine aminotransferase (ALT) and aspartate aminotransferase (AST), hepatocyte apoptosis, and hepatic levels of IL-1β, IL-6, TNF-α, and TGF-β in a mouse model of hepatotoxicity induced by acetaminophen (Item No. 10024).<sup>2</sup> It increases survival and reduces pulmonary fibrosis and leukocyte infiltration in a mouse model of LPS-induced endotoxemia.<sup>3</sup> Pelargonidin (0.04-0.4 mg/kg) reduces serum levels of nitric oxide (NO), TNF-α, and IL-6 and increases renal myeloperoxidase (MPO), superoxide dismutase (SOD), and catalase (CAT) activities, as well as increases survival, in a mouse model of cecal ligation and puncture-induced sepsis.<sup>4</sup> It also decreases escape latency in the Morris water maze, reduces hippocampal malondialdehyde (MDA) levels, and increases hippocampal acetylcholinesterase (AChE) activity in a rat model of Alzheimer's disease induced by amyloid-β 25-35 (Aβ (25-35); Item No. 24155).<sup>5</sup>

### References

1. Noda, Y., Kaneyuki, T., Mori, A., et al. *J. Agric. Food Chem.* **50**(1), 166-171 (2002).
2. Seo, M., Kim, H., Lee, J.H., et al. *Biochimie* **168**, 10-16 (2020).
3. Lee, B.-S., Lee, C., Yang, S., et al. *Chem. Biol. Interact.* **302**, 67-73 (2019).
4. Lee, I.-C. and Bae, J.-S. *J. Med. Food* **22**(1), 57-61 (2019).
5. Sohanaki, H., Baluchnejadmojarad, T., Nikbakht, F., et al. *Biomed. Pharmacother.* **83**, 85-91 (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.

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