

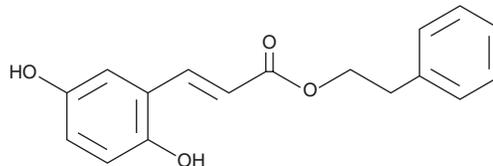
# PRODUCT INFORMATION



## 2,5-Dihydroxycinnamic Acid phenethyl ester

Item No. 29736

**CAS Registry No.:** 179691-97-5  
**Formal Name:** (2E)-3-(2,5-dihydroxyphenyl)-2-propenoic acid, 2-phenylethyl ester  
**MF:** C<sub>17</sub>H<sub>16</sub>O<sub>4</sub>  
**FW:** 284.3  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 251, 280, 362 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

2,5-Dihydroxycinnamic acid phenethyl ester is supplied as a crystalline solid. A stock solution may be made by dissolving the 2,5-dihydroxycinnamic acid phenethyl ester in the solvent of choice, which should be purged with an inert gas. 2,5-Dihydroxycinnamic acid phenethyl ester is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 2,5-dihydroxycinnamic acid phenethyl ester in these solvents is approximately 30 mg/ml.

### Description

2,5-Dihydroxycinnamic acid phenethyl ester is an inhibitor of 5-lipoxygenase (5-LO) with an IC<sub>50</sub> value of 0.33 μM for inhibition of 5-LO product synthesis in polymorphonuclear leukocytes (PMNLs) stimulated with the sarcoendoplasmic reticulum calcium ATPase (SERCA) inhibitor thapsigargin (Item No. 10522).<sup>1</sup> It scavenges 2,2-diphenyl-1-picrylhydrazyl (DPPH) radicals (IC<sub>50</sub> = 16.41 μM) in a cell-free assay. 2,5-Dihydroxycinnamic acid phenethyl ester selectively decreases viability of RCC4 and 786-O cells lacking the Von Hippel-Lindau (VHL) tumor suppressor gene (IC<sub>50</sub>s = 8 and 34.8 μM, respectively) over cells homozygously expressing VHL (IC<sub>50</sub>s = 99.6 and >100 μM, respectively). However, it also decreases viability of RCC10 VHL<sup>-/-</sup> and RCC10 VHL<sup>+/+</sup> cells (IC<sub>50</sub>s = 5.04 and 0.96 μM, respectively). It increases the levels of pro-caspase-3a, LC3B-I, and LC3B-II in RCC4 VHL<sup>-/-</sup> cells in a concentration-dependent manner.

### Reference

1. Selka, A., Doiron, J.A., Lyons, P.A., *et al.* Discovery of a novel 2,5-dihydroxycinnamic acid-based 5-lipoxygenase inhibitor that induces apoptosis and may impair autophagic flux in RCC4 renal cancer cells. *Eur. J. Med. Chem.* **179**, 347-357 (2019).

#### 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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