



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### Lieferung & Zahlungsart

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### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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# PRODUCT INFORMATION



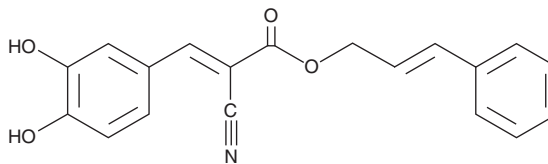
## Cinnamyl-3,4-dihydroxy- $\alpha$ -Cyanocinnamate

Item No. 10858

**CAS Registry No.:** 132465-11-3  
**Formal Name:** (2E)-2-cyano-3-(3,4-dihydroxyphenyl)-2-propenoic acid, 3-phenyl-2-propen-1-yl ester

**Synonym:** CDC  
**MF:** C<sub>19</sub>H<sub>15</sub>NO<sub>4</sub>  
**FW:** 321.3  
**Purity:**  $\geq 97\%$

**UV/Vis.:**  $\lambda_{\text{max}}$ : 251, 376 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:**  $\geq 4$  years



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

### Laboratory Procedures

Cinnamyl-3,4-dihydroxy- $\alpha$ -cyanocinnamate (CDC) is supplied as a crystalline solid. A stock solution may be made by dissolving the CDC in the solvent of choice, which should be purged with an inert gas. CDC is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of CDC in ethanol is approximately 0.25 mg/ml and approximately 20 mg/ml in DMSO and DMF.

CDC is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CDC should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. CDC has a solubility of approximately 0.1 mg/ml in a 1:10 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

CDC is an inhibitor of 5-lipoxygenase (5-LO; IC<sub>50</sub> = 15 nM).<sup>1</sup> It is selective for 5-LO over 12-LO and 15-LO (IC<sub>50</sub>s = 500 and 300 nM, respectively). CDC inhibits 5-LO product formation induced by the calcium ionophore A23187 (Item No. 11016) in isolated human polymorphonuclear leukocytes (PMNs), monocytes, and whole blood (IC<sub>50</sub>s = 0.5, 0.45, and 1.5  $\mu$ M, respectively). *In vivo*, CDC (3.5 mg/kg) increases survival in a mouse model of lethal shock induced by platelet-activating factor (PAF). It also reduces pleural levels of leukotriene B<sub>4</sub> (LTB<sub>4</sub>; Item No. 20110) in a rat model of carrageenan-induced pleurisy.

### Reference

1. Pergola, C., Jazzar, B., Rossi, A., *et al.* Cinnamyl-3,4-dihydroxy- $\alpha$ -cyanocinnamate (CDC) is a potent inhibitor of 5-lipoxygenase. *J. Pharmacol. Exp. Ther.* **338**(1), 205-213 (2011).

#### 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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