

**Product Name:** CD 3254

**Catalog No.:** 3302

**Batch No.:** 3

CAS Number: 196961-43-0

IUPAC Name: 3-[4-Hydroxy-3-(5,6,7,8-tetrahydro-3,5,5,8,8-pentamethyl-2-naphthalenyl)phenyl]-2-propenoic acid

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>24</sub>H<sub>28</sub>O<sub>3</sub>·<sup>3</sup>/<sub>4</sub>H<sub>2</sub>O

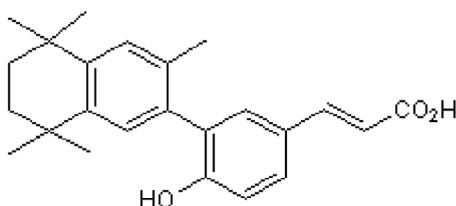
**Batch Molecular Weight:** 377.99

**Physical Appearance:** White solid

**Solubility:** DMSO to 100 mM  
ethanol to 100 mM

**Storage:** Store at -20°C

**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 96.7% purity

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:** Carbon Hydrogen Nitrogen

Theoretical 76.26 7.87

Found 76.26 7.81

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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**Description:**

CD 3254 is a selective RXR $\alpha$  agonist; exhibits no activity at RAR $\alpha$ , RAR $\beta$  or RAR $\gamma$  receptors. CD 3254 can promote chemical reprogramming of mouse fibroblasts. In a fast chemical reprogramming protocol, it promotes reprogramming of foetal mouse dorsal fibroblasts (MDFs) and adult mouse lung fibroblasts (MLFs) to iPS cells within 12 days.

**Physical and Chemical Properties:**

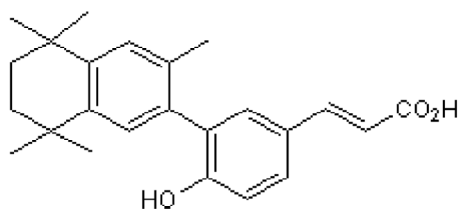
Batch Molecular Formula: C<sub>24</sub>H<sub>28</sub>O<sub>3</sub>· $\frac{3}{4}$ H<sub>2</sub>O

Batch Molecular Weight: 377.99

Physical Appearance: White solid

**Minimum Purity:**  $\geq$ 97%

**Batch Molecular Structure:**



**Storage:** Store at -20°C

**Solubility & Usage Info:**

DMSO to 100 mM  
ethanol to 100 mM

**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. \*Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**

**Chen *et al* (2023)** A fast chemical reprogramming system promotes cell identity transition through a diapause-like state. *Nat.Cell Biol.* **25** 1146. PMID: 37550515.

**Jin *et al* (2023)** Harnessing endogenous transcription factors directly by small molecules for chemically induced pluripotency inception. *Proc.Natl.Acad.Sci.* **23** 120. PMID: 37192170.

**le Maire *et al* (2009)** Activation of RXR-PPAR heterodimers by organotin environmental endocrine disruptors. *EMBO.Rep.* **10** 367. PMID: 19270714.

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