

Product Name: CD 2314

Catalog No.: 3824

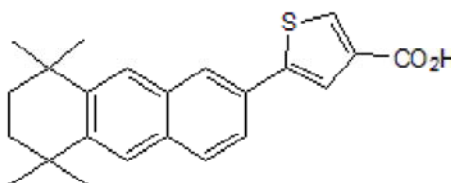
Batch No.: 3

CAS Number: 170355-37-0

IUPAC Name: 5-(5,6,7,8-Tetrahydro-5,5,8,8-tetramethyl-2-anthracenyl)-3-thiophenecarboxylic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₃H₂₄O₂S
Batch Molecular Weight: 364.5
Physical Appearance: Pale yellow solid
Solubility: DMSO to 100 mM
 ethanol to 10 mM with sonication
Storage: Store at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.4 (Ethyl acetate:Petroleum ether [1:1])
HPLC: Shows 99.4% purity
¹H NMR: Consistent with structure
 Mass Spectrum: Consistent with structure
 Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	75.79	6.64	
Found	75.42	6.66	

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

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Description:

Potent and selective RAR β receptor agonist (K_d values are 145 and >3760 nM for RAR β and RAR α receptors respectively; no binding detected at RAR γ). Inhibits growth of human HNSCC 22B, 183A and 22A cells (IC_{50} values are 3.0, 5.7 and 8.0 μ M respectively).

Physical and Chemical Properties:

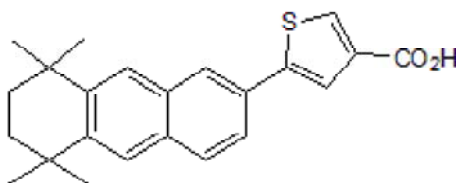
Batch Molecular Formula: C₂₃H₂₄O₂S

Batch Molecular Weight: 364.5

Physical Appearance: Pale yellow solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 10 mM with sonication

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. Our standard recommendations are:

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:

Zhao (2009) Mechanism of regulation and suppression of melanoma invasiveness by novel retinoic acid receptor-gamma target gene carbohydrate sulfotransferase 10. *Cancer Res.* **69** 5218. PMID: 19470764.

Sun (2000) Identification of receptor-selective retinoids that are potent inhibitors of the growth of human head and neck squamous cell carcinoma cells. *Clin.Cancer Res.* **6** 1563. PMID: 10778990.

Szondy (1998) Inhibition of activation-induced apoptosis of thymocytes by all-trans- and 9-cis-retinoic acid is mediated via retinoic acid receptor alpha. *Biochem.J.* **3** 767. PMID: 9560303.

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