

**Product Name:** TTNPB

**Catalog No.:** 0761

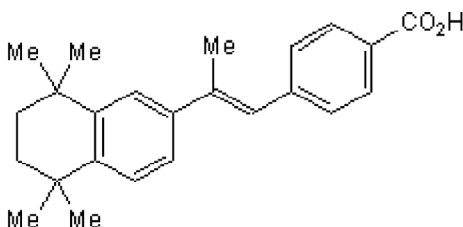
**Batch No.:** 4

CAS Number: 71441-28-6

IUPAC Name: 4-[(E)-2-(5,6,7,8-Tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)-1-propenyl]benzoic acid

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>24</sub>H<sub>28</sub>O<sub>2</sub>  
**Batch Molecular Weight:** 348.48  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 10 mM  
 ethanol to 5 mM with gentle warming  
**Storage:** Desiccate at -20°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**TLC:** R<sub>f</sub> = 0.3 (Chloroform:Methanol:AcOH [90:9:1])  
**HPLC:** Shows 99.6% purity  
<sup>1</sup>H NMR: Consistent with structure  
 Mass Spectrum: Consistent with structure  
 Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	82.72	8.1	
Found	82.49	8.11	

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

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**Description:**

TTNPB is an extremely potent analog of retinoic acid, selective for the retinoic acid receptor (RAR) subtype. Enhances reprogramming efficiency in chemically induced pluripotent stem cells (CiPSCs).

**Physical and Chemical Properties:**

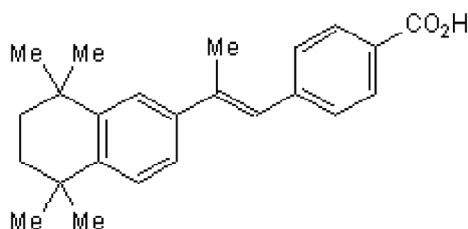
Batch Molecular Formula: C<sub>24</sub>H<sub>28</sub>O<sub>2</sub>

Batch Molecular Weight: 348.48

Physical Appearance: White solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**Storage:** Desiccate at -20°C

**CAUTION** - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

**Solubility & Usage Info:**

DMSO to 10 mM

ethanol to 5 mM with gentle warming

**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:**

**Hou et al** (2013) Pluripotent stem cells induced from mouse somatic cells by small-molecule compounds. *Science* **341** 651. PMID: 23868920.

**Minucci et al** (1996) Retinoid X receptor-selective ligands produce malformations in *Xenopus* embryos. *Proc.Natl.Acad.Sci.U.S.A.* **93** 1803. PMID: 8700839.

**Loeliger et al** (1980) Arotinoids, a new class of highly active retinoids. *Eur.J.Med.Chem.-Chim.Ther.* **15** 9.

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