

**Product Name:** Anacardic acid

**Catalog No.:** 3084

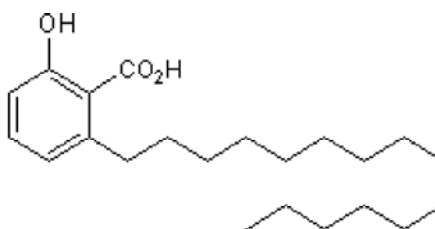
**Batch No.:** 2

CAS Number: 16611-84-0

IUPAC Name: 2-Hydroxy-6-pentadecylbenzoic acid

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>22</sub>H<sub>36</sub>O<sub>3</sub>·¼H<sub>2</sub>O  
**Batch Molecular Weight:** 353.02  
**Physical Appearance:** Off-white solid  
**Solubility:** DMSO to 100 mM  
ethanol to 50 mM  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 97.3% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	74.85	10.42	
Found	75.21	10.39	

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

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**Description:**

Noncompetitive inhibitor of PCAF and p300 histone acetyltransferase (HAT) activity (IC<sub>50</sub> values are ~5.0 and ~8.5 μM respectively). Inhibits NF-κB activation. Also reported to selectively activate Aurora kinase A-mediated phosphorylation of histone H3 and to inhibit protein SUMOylation. Exhibits antitumor, antimicrobial and antioxidant activity. Also promotes cardiomyocyte differentiation from mESCs.

**Physical and Chemical Properties:**

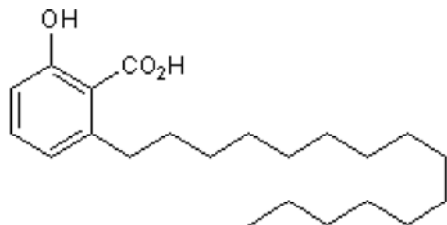
Batch Molecular Formula: C<sub>22</sub>H<sub>36</sub>O<sub>3</sub>·¼H<sub>2</sub>O

Batch Molecular Weight: 353.02

Physical Appearance: Off-white solid

**Minimum Purity:** ≥97%

**Batch Molecular Structure:**



**Storage:** Store 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 100 mM

ethanol to 50 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. 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:**

**Fukuda et al** (2009) Ginkgolic acid inhibits protein SUMOylation by blocking formation of the E1-SUMO intermediate. *Chem.Biol.* **16** 133. PMID: 19246003.

**Cui et al** (2008) Histone acetyltransferase inhibitor anacardic acid causes changes in global gene expression during in vitro *Plasmodium falciparum* development. *Eurkaryot.Cell* **7** 1200.

**Kishore et al** (2008) Specific small molecule activator of aurora kinase A induces autophosphorylation in a cell-free system. *J.Med.Chem.* **51** 792. PMID: 18215015.

**Sung et al** (2008) Anacardic acid (6-nonadecyl salicylic acid), an inhibitor of histone acetyltransferase, suppresses expression of nuclear factor-κB-regulated gene products involved in cell survival, proliferation, invasion, and inflammation through inhibition of the Blood **111** 4880. PMID: 18349320.

**Balasubramanyam et al** (2003) Small molecule modulators of histone acetyltransferase p300. *J.Biol.Chem.* **278** 19134. PMID: 12624111.

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