

Anacardic Acid

Catalog No: tcsc0018377



Available Sizes

Size: 5mg

Size: 10mg

Size: 25mg



Specifications

CAS No:

16611-84-0

Formula:

$C_{22}H_{36}O_3$

Pathway:

Epigenetics;Epigenetics

Target:

Epigenetic Reader Domain;Histone Acetyltransferase

Purity / Grade:

>98%

Solubility:

10 mM in DMSO

Alternative Names:

Hydroginkgolic acid

Observed Molecular Weight:

348.52

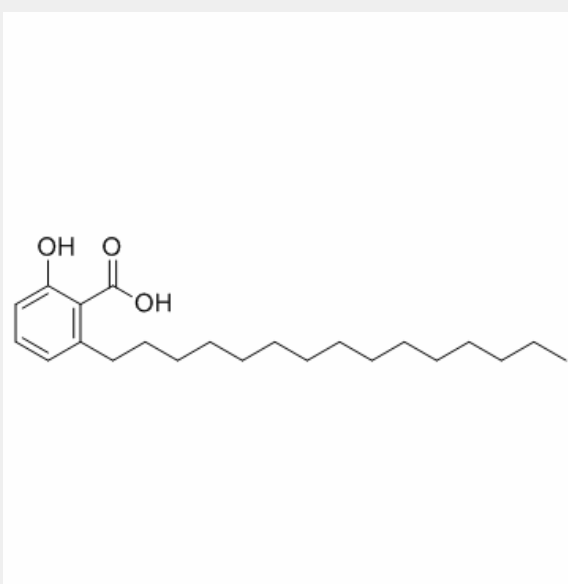
Product Description

Anacardic Acid, extracted from cashew nut shell liquid, is a **histone acetyltransferase** inhibitor, inhibits HAT activity of p300 and PCAF, with **IC₅₀**s of ~8.5 μ M and ~5 μ M, respectively.

IC50 & Target: IC50: ~8.5 μ M (p300 HAT), ~5 μ M (PCAF)^[1]

In Vitro: Anacardic Acid is a histone acetyltransferase, inhibits HAT activity of p300 and PCAF, with IC₅₀s of ~8.5 μ M and ~5 μ M, respectively^[1]. Anacardic Acid (300 μ M) inhibits mycelial growth. Anacardic Acid (50 μ M) induces apoptosis-like characteristics in *M. oryzae*, and the effect is caspase independent. Anacardic Acid (1-80 μ M) leads to loss of mitochondrial potential. Anacardic Acid (1-60 μ M) also exhibits antioxidant activity in *M. oryzae*^[3].

In Vivo: Anacardic acid (5 mg/kg, i.p.) attenuates the binding of HATs to the promoter of MEF2A and reverse hyperacetylation of H3K9ac caused by phenylephrine in C57BL/6 mice. Anacardic acid inhibits the level of transcription on MEF2A and cardiac development-related downstream genes, attenuates the protein overexpression of cardiac downstream genes caused by phenylephrine, reverses and attenuates cardiac hypertrophy in the hearts of mice exposed to phenylephrine, and attenuates the left ventricular pressure and improves cardiac function in the cardiac hypertrophy mice^[2].



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