

Anacardic Acid, HAT Inhibitor

Catalog	Unit
TBI4015-5MG	5 mg
TBI4015-25MG	25 mg

Product Details

Formal Name: 2-Hydroxy-6-pentadecylbenzoic acid
Alternate Names: 6-Pentadecylsalicylic acid; 6-PDSA
Molecular Formula: C₂₂H₃₆O₃
Formula Weight: 348.50
CAS Number: 16611-84-0
Purity: >98%
Formulation: powder
Solubility: Soluble in DMSO (up to at least 25 mg/ml) or in Ethanol (15 mg/ml)
Storage: -20°C
Stability: ≥ 1 year.



Applications

HAT Inhibitor

Functions

Anacardic acids occur in cashew nut shells and are similar in structure to urushiols, the irritating components of poison ivy. Anacardic acid inhibits histone acetyltransferases (HATs) p300 (IC₅₀ = 8.5 μM) and PCAF (IC₅₀ = 5.0 μM) with no effect on HDACs. It also suppresses expression or activity of proteins involved in invasion and angiogenesis, e.g. MMP-2 (IC₅₀ = 11 μM) and -92. 6-PDSA, a saturated form of anacardic acid, induces macrophage activation via MAPK and NF-κB3. When used at 125 μM, it sensitized cancer cells to radiation therapy by reducing histone expression. It also blocks inducible and constitutive activation of NF-κB in leukemia cells.

Application Procedures

First dissolved in DMSO (up to at least 25 mg/ml) or in Ethanol (15 mg/ml), then diluted to aqueous buffer. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

For research use only.