

Valproic Acid (sodium salt)

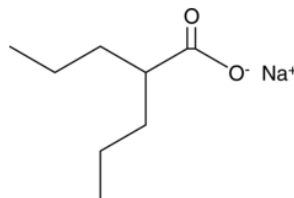
Catalog #: 27207

Lot #: 120403

Size: 10 g

Structure:

CAS Registry #: 1069-66-5



Purity: ≥95%

Chemical Formula: C₈H₁₆O₂•Na

Molecular Weight: 167.2

Description: Valproic acid inhibits histone deacetylases (HDACs), in particular Class I HDACs. It is an analog of the natural fatty acid valeric acid. Valproic acid also inhibits GSK3 and depletes cellular inositol-1,4,5-triphosphate. It can have strong effects on stem cell differentiation and self-renewal, and it shows promise in treating cancer and Alzheimer's disease.

Appearance: A crystalline solid

Solubility: Soluble in ethanol, DMSO and dimethyl formamide (DMF). Solubility in ethanol is 30 mg/ml and 5 mg/ml in DMSO and DMF. For organic solvent-free aqueous solutions, prepare by directly dissolving the crystalline compound in aqueous buffers. Do not store aqueous solutions for more than one day.

Biological Activity: Valproic acid inhibits Class I HDACs with an IC₅₀ of ~ 2 mM.

Storage/Stability: Store at or below -20°C for up to two years.

Quality Control: The purity was determined by HPLC analysis.

References:

1. Jung, G., *et al.*, *BMC Cell Biol.* 2008; **9(66)**.
2. Bug, G., *et al.*, *Cancer Res.* 2005; **65(7)**: 2537 – 2541.
3. Gottlicher, M., *et al.*, *EMBO J.* 2001; **20(24)**: 6969 – 6978.