1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( \text{C}_8\text{H}_{15}\text{NaO}_2\cdot0.2\text{H}_2\text{O} \)

Batch Molecular Weight: 169.79

Physical Appearance: White crystalline solid

Solubility: water to 100 mM
DMSO to 50 mM

Storage: Desiccate at RT

Batch Molecular Structure:

\[
\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{CO}_2\text{Na}
\]

2. ANALYTICAL DATA

\(^1\text{H NMR:}\)
Consistent with structure

Microanalysis:

<table>
<thead>
<tr>
<th></th>
<th>Carbon</th>
<th>Hydrogen</th>
<th>Nitrogen</th>
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</thead>
<tbody>
<tr>
<td>Theoretical</td>
<td>56.59</td>
<td>9.14</td>
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<tr>
<td>Found</td>
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<td>9.21</td>
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</table>
Product Information

Product Name: Valproic acid, sodium salt
Catalog No.: 2815 Batch No.: 1
CAS Number: 1069-66-5
IUPAC Name: Sodium 2-propylpentanoate
EC Number: 213-961-8

Description:
Histone deacetylase inhibitor (IC_{50} = 400 μM) that exhibits anticancer, anti-inflammatory and neuroprotective effects. Displays anticonvulsive activity via an increase in GABA levels and decreases Aβ production in animal models of Alzheimer's disease. Also attenuates NMDA-mediated excitation, blocks voltage-gated Na^+ channels and modulates firing of neurons. Enables induction of pluripotent stem cells from somatic cells by Oct4 and Sox2. Can induce autophagy by inhibiting inositol synthesis.

Physical and Chemical Properties:
Batch Molecular Formula: C_{12}H_{15}NaO_{2}.0.2H_{2}O
Batch Molecular Weight: 169.79
Physical Appearance: White crystalline solid

Storage: Desiccate at RT

Solubility & Usage Info:
- water to 100 mM
- DMSO to 50 mM
CAUTION - This product is extremely hygroscopic and we recommend that it is desiccated upon arrival.

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:


