# **PRODUCT** INFORMATION



## (±)-2-propyl-4-Pentenoic Acid

Item No. 23090

CAS Registry No.:	1575-72-0
Formal Name:	2-propyl-4-pentenoic acid
Synonyms:	2-Allylpentanoic Acid, 4-ene
	VPA
MF:	C <sub>8</sub> H <sub>14</sub> O <sub>2</sub>
FW:	142.2
Purity:	≥98%
Supplied as:	An oil
Storage:	-20°C
Stability:	≥4 years
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.	

### Laboratory Procedures

(±)-2-propyl-4-Pentenoic acid (4-ene VPA) is supplied as an oil. A stock solution may be made by dissolving the 4-ene VPA in the solvent of choice, which should be purged with an inert gas. 4-ene VPA is slightly soluble in methanol.

### Description

4-ene VPA is a major metabolite of valproic acid (Item No. 13033).<sup>1</sup> It undergoes  $\beta$ -oxidation to form reactive metabolites that induce hepatotoxicity in rats. 4-ene VPA is also neuroteratogenic, reducing forebrain size and inducing deformation of the neural tube in mouse embryos.<sup>2</sup>

#### References

- 1. Tang, W. and Abbott, F.S. A comparative investigation of 2-propyl-4-pentenoic acid (4-ene VPA) and its α-fluorinated analogue: Phase II metabolism and pharmacokinetics. Drug Metab. Dispos. 25(2), 219-227 (1997).
- 2. Gofflot, F., Nassogne, M.C., Etzion, T., et al. In vitro neuroteratogenicity of valproic acid and 4-en-VPA. Neurotoxicol. Teratol. 17(4), 425-435 (1995).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 01/03/2023

## CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM