Hexyl-4-pentynoic Acid (HPA)

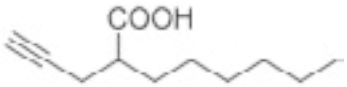
Catalog Number P008-10MG

Catalog Number P008-50MG

ARBOR ASSAYS

FEATURES

- Induces histone hyperacetylation
- 30 times lower IC50 than VPA
- Protects against glutamate-induced excitotoxicity



INTRODUCTION

HPA causes histone hyperacetylation and protect against glutamate-induced excitotoxicity in cultured neurons. HPA is one of the most effective valproic acid derivatives in terms of teratogenic potential in ice, hyperacetylation of core histone 4 in treated F9 Cells, and one of the lowest concentrations of half-maximum effect in HDAC enzyme inhibition assays. Inhibits HDAC activity with an IC50 of 13 µM (VPA= 398 µM).

FORM:	Colorless Oil
MOLECULAR WEIGHT:	182.26
STORAGE:	Room temperature
FORMULA:	$C_{11}H_{18}O_2$
CAS NUMBER:	96017-59-3
OTHER NAMES:	±2-Hexyl-4-pentynoic acid, 2-(2-propynyl)octanoic acid (racemic), HPA
USES:	Soluble to 25 mg/mL in DMSO and Ethanol.

REFERENCES:

Eikel D, Lampen A, Nau H. Teratogenic effects mediated by inhibition of histone deacetylases: evidence from quantitative structure activity relationships of 20 valproic acid derivatives. Chem.Res. Toxicol. 19:272–278 (2006).

Leng Y, Marinova Z, Reis-Fernandes MA, Nau H, Chuang DM. Potent neuroprotective effects of novel structural derivatives of valproic acid: potential roles of HDAC inhibition and HSP70 induction. Neurosci Lett. 476:3, 127-32. (2010).

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