

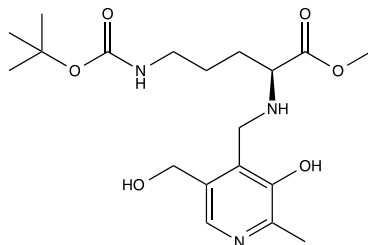
**Catalog # 10-4553**

**POB**

CAS# 946135-39-3

N-(4'-Pyridoxyl)-L-Ornithine(BOC)-OMe

Lot # FBA2140



Pyridoxal 5'-phosphate – dependent ornithine decarboxylase (ODC) is a key enzyme involved in polyamine synthesis and a potential cancer drug target. POB is a transition state-based, cell permeable pro-drug inhibitor of ODC. Intracellularly, POB is phosphorylated by pyridoxal kinase and the methyl ester hydrolyzed. This active inhibitor most likely binds apo-ODC resulting in greatly reduced ODC activity and inhibition of cellular proliferation. POB was able to inhibit proliferation in a wide variety of tumor cell lines: LN229 (IC<sub>50</sub> = 50 μM), Jurkat, COS7, SW2 and both high and low-grade glioblastoma multiforme. More potent than DFMO.

- 1) Wu et al., (2007), *New transition state-based inhibitor for human ornithine decarboxylase inhibits growth of tumor cells*; *Mol. Cancer Ther.* **6** 1831
- 2) Wu et al., (2011), *A novel approach to inhibit intracellular vitamin B6-dependent enzymes: proof of principle with human and plasmodium ornithine decarboxylase and human histidine decarboxylase*; *FASEB J.* **25** 2109

**PHYSICAL DATA**

Molecular Weight:	397.47
Molecular Formula:	C <sub>19</sub> H <sub>31</sub> N <sub>3</sub> O <sub>6</sub>
Purity:	>98% by HPLC
	NMR: (Conforms)
Solubility:	Soluble in Ethanol (> 25 mg/mL), DMSO (>25 mg/ml) or Water (2 mg/mL with warming).
Physical Description:	White solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in ethanol or DMSO may be stored at -20°C for up to 1 month. Solutions in water should be made fresh daily.

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**