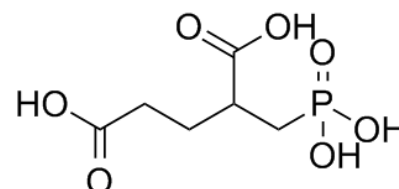


Product Name : 2-PMPA
Cat. No. : PC-42256
CAS No. : 173039-10-6
Molecular Formula : C₆H₁₁O₇P
Molecular Weight : 226.1211
Target : Carboxypeptidase
Solubility : H₂O: ≥ 28 mg/mL



Biological Activity

2-PMPA is a potent and selective NAALADase (Glutamate carboxypeptidase II, **GCPII**/PSMA) inhibitor with K_i of 280 pM. 2-PMPA has no substantial activity against NMDA, AMPA, mGluRs, and glutamate transporters. 2-PMPA potently inhibits oxidative metabolism and glycolysis with IC₅₀ of 617 pM in rat cortical cultures. 2-PMPA robustly protects against ischemic injury in a neuronal culture model of stroke and in rats after transient middle cerebral artery occlusion, increases NAAG and attenuates the ischemia-induced rise in glutamate.

References

Slusher BS, et al. *Nat Med*. 1999 Dec;5(12):1396-402.
 Thomas AG, et al. *Brain Res*. 1999 Oct 2;843(1-2):48-52.
 Tortella FC, et al. *Eur J Pharmacol*. 2000 Aug 18;402(1-2):31-7.
 Harada C, et al. *Neurosci Lett*. 2000 Oct 6;292(2):134-6.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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